SHOUT
SHARE
IT

SMITHSONIAN INSTITUTION LIBRARIES

SMITHSONIAN INSTITUTION LIBRARIES

QH
7
E135
SI
NH

EANHS

BULLETIN

Editor: Box 29003, Kabete, Nairobi, Kenya

EANHS Secretary: Box 44486, Nairobi, Kenya

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5 × 23 cm (10 × 8 inches), line drawings can be reproduced but the area should not be more than 17.5 × 23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G.C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

E.A.N.H.S. BULLETIN JANUARY 1973

CONTENTS

Attack on a Giraffe and calf by a Lioness in Nairobi National Park - - 2

A Sunbird fight - 3

Some interesting species of birds recently observed in Arusha N. Park 4

Hazards to breeding birds - 5

Albino Tree Hyrax - 6

Letters to the Editor - 7

Elephants and Hyrax - 9

Request for information -10

Wanted -10

Notice -10

Society Functions -11

Important Notice -11

For Sale -12

ATTACK ON A GIRAFFE AND CALF BY A LIONESS IN NAIROBI NATIONAL PARK

We first saw the lioness moving fast through the long grass, below the Campi ya Fisi rocks towards the Mokoyeti stream in Lion Valley. We followed the track along the edge of the stream but were unable to find her and, as the track became wet and soggy decided to retrace our steps. We then saw that the lioness had crossed the stream and was watching a female giraffe with a new-born calf half way up the hill towards No.18. The lioness stalked up through the grass but the giraffe had seen her so was moving off toards the No.18 road, she was not able to move fast as the calf was extremely wobbly on it's legs.

We hurried round to find that they had crossed the road; the lioness was lying only a few yards from the giraffe who had her calf standing between her forelegs under her chest. The lioness kept circling them and, whenever it came close enough the mother would swing round ready to attack by smashing down her forefoot. If this vicious kick connected with the lioness' head it would have smashed her skull; this the lioness knew for she maintained a respectful distance. Each time an attack from the giraffe took place it was accompanied by a deep growling roar. We took this to be the lioness but then realised that it was the giraffe making the noise as we could see that she swelled out her throat and cheeks as well as contracted her stomach to expel air when making it. I did not see the giraffe open it's mouth when making the noise. Streams of saliva trailed from the mouths of both mother and calf. At other times the mother blew through her nose very like a horse. The roar was loud and menacing and must have been stimulated by the great stress upon the giraffe.

The mother walked away exposing the calf to an attack; her actions appeared almost deliberate, as when the lioness attacked she wheeled round jabbing at the lioness with her forefeet. Once the calf was knocked down and the lioness received a glancing blow from a hoof on her shoulder; after this she was even more careful of moving in close. This sparring continued as the giraffe moved down the grass covered hill towards the Omanayi stream. The lioness managed to knock the calf down two or three times but did not have time to get hold of it's throat before the mother attacked. Each time the mother advanced the lioness backed away not wishing to lay herself open to those deadly hooves. The calf was kept, most of the time, between the mother's forelegs; it appeared bewildered as it sometimes strolled off shakily at a tangent, but was always quickly covered by the mother. Whenever the mother moved off followed by the calf, the lioness advanced.

This drama attracted other giraffe feeding along the Omanayi stream who just stood watching - at one time it looked as though a large bull was coming to help the distressed mother - but he evidently thought discretion the best move as he remained watching from a safe distance. In fact, all the giraffe kept their distance, leaving the poor mother to fight her own battle. It appeared that the mother was trying to get to the riverine scrub along the banks of the Omanayi, but the banks were too steep for her to get her calf across the river. The lioness kept up her waiting tactics, but charged in whenever an opportunity occurred. She knocked the calf down repeatedly but it staggered back onto it's unsafe legs - each time seeming to take longer to recover.

Just before dark, another lioness pushed past our Land Rover having come from further upstream, no doubt attracted by the roars of the giraffe. This extra adversary made the mother's task more difficult as now, both lionesses kept circling the mother and calf. The giraffe maintained her thrusting attacks although the calf was obviously tiring. Once the mother thought the calf was finished as she started to move away but rushed back as once again it struggled weakly to get up. The lionesses moved in closer but were still unable to make the final kill as they were bravely attacked by the mother.

At last, after an attack from one of the lionesses the calf gave up struggling and the mother also seemed to give up. The urge to leave a dangerous situation was uppermost in her mind as she moved away only to return when she remembered her calf lying on the ground. It was a case of an inner tumult of self preservation and motherly love and she seemed torn between the two.

It was well after dark before we left this grim drama when the outcome was obviously in favour of the lions. The mother giraffe was still in the vicinity on the following afternoon, walking round in circles watching the lions, she eventually moved off towards No.18A.

C.E. Norris,
Box 42406,
Nairobi.

- - - - - - - - - - - - - - -

A SUNBIRD FIGHT

On Tuesday 21st November 1972 in the morning at eleven o'clock, my son took the car out, and as he drove down the driveway, a pair of small birds fluttered down and fell struggling to the road in front of him. He pulled up and backed. The birds were locked in battle, hooting did not put a stop to the combat but drew my attention and I went out to see what he wanted or what was happening.

On the road were two male Collared Sunbirds *Anthreptes collaris* struggling fiercely while a third, probably a female, sat watching the fight from a convenient shrub. The fighters rolled, twisted, turned, wings alternately open or closed, tails fanned. This way and that they struggled stabbing at each other.

I approached to within a metre, thinking I should stop the fight but deciding after all, it was not my affair and that I should not interfere.

Their feet and claws were interlocked, the birds breast to breast, rolling on the ground. One clearly had the upper hand and the second lay on its side with wings half-spread. The upper bird rained blow after blow with its sharp bill at the head and breast of the bird below, these were vicious stabs and attempts were obviously made to strike the opponent's eye.

With one wing supporting below and the other raised, the stronger bird kept its balance while raining these savage blows and all the while it sang, a chirrupy little warble.

I approached closer and still the combatants took no notice of me. The fighting was intense and had lasted a full three minutes, the second bird was clearly losing the battle and the hen fluttered over the pair oblivious of me as she watched the fight. The weaker bird managed to lock its bill with its opponents and they rolled over and over, feet still closely locked. The stronger managed to free its bill and again proceeded to stab countless rapid blows into the breast and head of the other. They were nearly exhausted and I had now decided I must stop the fight and maybe capture the weaker bird to examine its injuries but my approaching hand was enough, the birds parted fluttering weakly away together into a bush, the female in pursuit.

I could not find them again, but trust that the loser made good his escape. The Collared Sunbirds are now nesting and I have found several nests. It would seem we had been watching a battle royal for the favours of a mate. It was a wicked fight while it lasted and all of five minutes.

G.R. Cunningham - van Someren,
Box 24947, Karen.

The above reminds me of an incident which happened in Tsavo National Park (West) near Kamboyo on 23rd November 1971. I was driving along when I saw a "ball" on the ground on the right-hand side of the road. I drove slowly alongside, opened the door, and picked up the "ball" which consisted of two Crombecs *Sylvietta brachyura* locked in combat. I separated the birds which then flew away.

Ed.

- - - - - - - - - - - - - -

SOME INTERESTING SPECIES OF BIRDS RECENTLY OBSERVED IN ARUSHA NATIONAL PARK, TANZANIA

1. Hildebrandnt's Starling *Spreo hildebrandti*.

This starling is a common bird in dry woodland country and wooded grassland at 1300m alt. within 6km of the northern boundary of the park, but is rarely seen inside the park.

During August, September and October 1972, I saw several feeding on fruit of a tree *Turraea robusta*. This is a tree of the dry evergreen forest which does not occur in their normal habitat. The ripe fruits had attracted the birds and they left after the fruiting season was over.

It seemed that the resident birds recognised the new-comers to their habitat because I saw a Ruppell's Robin Chat *Cossypha semirufa* and a White-eyed Slatey Flycatcher *Melaenornis chocolatina* chasing the Starlings from the tree.

2. Speckled Pigeon *Columba guinea.*

This pigeon is also very seldom seen in the Arusha Park, it is also common in the drier and lower country to the north. I had a good view of the pigeon using binoculars 7 X 50. I noted the vinous-chestnut back, grey underparts and white spots on the wings.

In January and again in July 1972 I observed a flock of these pigeons in Juniper Hill forest at 1500m alt. below the eastern slopes of Meru Mountain. I once noted this bird trying to enter the eaves of a house in a native village a few kilometres outside the park boundary, possibly searching for food.

3. Lilac-breasted Roller *Coracias caudata.*

This roller is also a very common bird in wooded-grassland areas, but is very seldom seen in this park. I observed this bird in the park during March and October 1970 and again in November 1972.

On the last occasion I observed a pair sitting on a twig of a dead Acacia tree. I noted the tail streamers, lilac throat and breast and greenish-blue belly. After watching them for about 15 minutes they flew away.

I do my observations as part of my daily duties as a Field Assistant in Tanzania National Parks.

Sifaeli Mungure,
Kusare Research Camp,
Arusha National Park,
Box 3134, Arusha.

HAZARDS TO BREEDING BIRDS

Our experience at Karen with nesting birds has been very much the same as that of Beesley (*E.A.N.H.S. Bulletin* 1972:180-181). Over a ten year period all nests found were mapped. Many were examined regularly, with observations made for long periods while studying nest behaviour or the nests were subject to long periods of photography from a hide.

Breeding success in any one year was seldom more than 30%, eggs to fledgeling, due to predation or other factors. We regard the mere fact of having found a nest, even without touching it, reduces the chance of its successful completion by 30%. Predation was responsible for 45 to 55% loss, more so with loss of eggs. In several cases the predator was seen in action, even photographed in the act!

The predators have been Genets, Mongoose, Rats, Squirrels and Snakes. The Galago was not above suspicion in one or two cases. The following birds were also predators: Fiscal Shrike *Lanius collaris*, Boubou *Laniarius ferrugineus* and the Puff-back *Dryoscopus cubla* with the Coucal *Centropus superciliosus* and Fischer's Flycatcher *Melaenornis chocolatina* as well.

Down the Magadi road over four seasons now, the nest loss is around 60%, excepting colonial tree-nesting species such as weavers, and even they suffer from the hands of man. Tracks in the dry dusty soil have indicated snakes, mongoose, Ground Squirrel and Masai 'watoto' and their destructive cattle. The Masai have a bad habit of 'bottling' up the Red and Yellow Barbets *Trachyphonus erythrocephalus* in their nest holes at night and then digging out the birds. Their skins form part of the headgear for circumcision ceremonial purposes. I know of several colonies destroyed for this purpose.

On one occasion the predator, at Karen, was a very young Mkamba who had been engaged as garden help. We caught him raiding the nest of the Streaky Seedeater *Serinus striolatus* and he popped the warm living, naked young bird into his mouth - "Tam'sana"! That was many years ago, for later this chap turned out to be an expert nest finder, he always carried a rusty pair of old 12-bore gun barrels with him which he used after the fashion of a diviner's rod. He said, after they were set swinging, that where they pointed there would be a nest! He found a very great number of nests.

Other predators encountered have been hornbills and various hawks. The Goshawk *Accipiter tachiro* has taken ducklings and is suspect, with the large-mouthed Black Bass, of taking young waterfowl in my dam. The Spectacled Weaver *Ploceus occularis* was busy nest building last Sunday tearing strips of palm fronds at 08.30h but at 10.00h I found its remains on the lawn, the work of the Goshawk or the smaller Little Sparrow Hawk *A. minullus*. Domestic cats are a curse.

"Siafu" Doryline ants, took two chicks of the White-starred Bush Robin *Pogonocichla stellata* which had a nest in my plant house after I had waited patiently for the eggs to hatch before setting up the hide for photography. My late cousin, Dr V.D. van Someren recorded a similar incident when the trogon's nest (*Apaloderma narina*) which he was about to photograph was raided by these ants. Bees have caused desertions of hole nesting species, an example of which is that of the Ring-necked Parakeet *Psittacula krameri* in the Nairobi National Park recently.

G.R. Cunningham - van Someren,
Box 24947, Karen.

- - - - - - - - - - - - - - - -

ALBINO TREE HYRAX AT KAREN

It is my custom to tap with a stick all trees with holes as I wander around. This is done to flush possible hole nesting birds. On 20th November 1972, I tapped a gnarled old *Warburgia ugandensis* tree in my forest and much to my surprise, out of the hole popped a three-quarters grown albino tree hyrax *Dendrohyrax arboreus* about 3m above me. We indulged in a staring match for a few minutes then the animal disappeared into another hole. I do not recall any record, in the extensive literature on the Hyrax, of a true albino specimen.

G.R. Cunningham - van Someren,
Box 24947, Karen.

- - - - - - - - - - - - - - - -

LETTERS TO THE EDITOR

Sir,

I was pleased to see the tribute to Dr L.S.B. Leakey in the December *Bulletin*.

I should like to suggest that the Society has an "L.S.B. Leakey Memorial Lecture" each year. The subject could be on any aspect of natural science and a distinguished speaker, either from within East Africa or outside, could be invited to deliver the lecture.

Such a memorial lecture would cost the Society nothing other than a certain amount of hospitality. It would seem a fitting tribute to one who, apart from his international reputation, did a great deal for this Society.

John E. Cooper,
C/o Veterinary Research Laboratory,
P.O. Kabete.

Sir,

I was interested in W.G. Harvey's contribution in the *Bulletin* for October 1972, about Woolly-necked Stork *Ciconia episcopus* near Dar es Salaam. I used to see the species, including young birds of the year, quite frequently there although my surviving records only mention occurrences in October and March 1947-48, in the Mjimwema-Sinda island area to the south of the harbour mouth. However, I do have one definite Tanzania breeding record of a pair at their nest, in the fork of a baobab, discovered on 15th August 1948 about 100km from Dar es Salaam and a few kilometres downstream of the ferry where the Morogoro road used to cross the Ruvu river.

The same author in the same issue of the *Bulletin* refers to the occurrence of Caspian Plover *Charadrius asiaticus* at Dar es Salaam. I believe the first record there and second record of the species on the East African coast (- see *British Birds* 49:282, 1956) was of a 'trip' of eight which frequented the playing fields and golf course of the Gymkana Club from 18th September 1955 for about a week. It looks as if the species tends to visit the coast rather early in the season, concentrating in its more usual up-country haunts (where most of my records were between mid-November and March) after the onset of the short rains.

Hugh F.I. Elliott,
173 Woodstock Road,
Oxford, England.

Sir,

I have been told that the following observations on the eating habits of the Fiscal Shrike *Lanius collaris*, normally an insect eater, may be of interest to members.

A Fiscal Shrike was observed to eat bread at my bird table on 14th November 1972 during a rainstorm, and has since eaten fried tomato skin and fried bacon rind, both of which it seems to take in preference to the bread. The shrike has also been seen feeding one of its two very demanding youngsters with bread.

Incidentally, the above mentioned bird table was set up in April 1972, but no bird was observed near it for approximately six months, even though bread was put on it fairly regularly. Then suddenly one morning in October a pair of Reichenow's Weavers *Ploceus baglafecht* arrived at the table, shortly followed by three other species of bird. Since then the table has been visited by numerous birds every day.

D.W.G. Smith,
Box 40584,
Nairobi.

Sir,

Having returned once more from the land of the Midnight Sun, I am surprised that no one has mentioned in the *Bulletin* a delightful little place in Malindi called Birdland. Perhaps some members may be coming to the coast during the Christmas holiday who would be interested in visiting this place, which is on the left on the tarmac road leading to the Marine Park. It is signposted, entrance is 5/- and it is open all day. The owner tells me that this goes towards feeding the birds on fish, meat, fruit, seeds etc. There is a good collection of Kenya's most beautiful birds.

Mary Buckle,
Box 57, Kilifi.

Sir,

TRACKS OF EAST AFRICAN ANIMALS

I have long felt the need for a guide to the tracks of East African animals, especially the smaller mammals such as the mongooses, genets, zorilla, ratel etc. I am equally sure others must also have felt this need and that there are many knowledgeable people who could provide such a guide. The *Bulletin* seems to me an admirable place for such a publication.
Ken Bock is giving us an excellent guide to coral reef fishes, will some expert 'tracker' do the same for animal tracks and spoor?

D.L. Ebbels,
Box 1433,
Mwanza, Tanzania.

Sir,

On 30th July 1972, at about 6.30 p.m., in the lower Mara River area, Kenya we observed a lone bull elephant, full grown, feeding on the upper branches of an acacia and standing unsupported on his hind legs in order to reach the topmost branches.

The elephant was watched until dusk, and it was unfortunate that the light was insufficient for photography. The excercise was repeated several times, and on each occasion the procedure was the same - an exploratory search with the trunk, a brief 'mark time' with the forefeet, a flex of the muscles followed by rearing straight up on the hind legs.

We timed the elephant on six occasions while he remained upright as follows: 5 s, 7 - 10 - 4 - 6 - 8 s. At no time were the forefeet rested against the trunk of the tree and the animal was quite unsupported.

A remarkable sight, which I had not seen before, and so far I have not found any one else who has done so, despite having consulted a number of authorities. Are there any other records of this?

D.H. Round-Turner,
Box 14249,
Nairobi.

- - - - - - - - - - - - - - - -

ELEPHANTS AND HYRAX

Dr Sale's lecture on 4th December on Elephants and Hyrax was for me one of the most interesting heard in the National Museum Hall for a long time. Dr Sale talked about these two animals and showed how they are related.

The Superorder Paenungulata has three living orders, the Hyracoidea (Hyrax), Proboscidea (Elephants) and the Sirenia (Dugong and Manatee group). Little was said about the dugong in the lecture. The foot structure in the Elephant and Hyrax are similar, each having five digits and ending in small hooves which look like nails. Again, tusks in the two groups point to similarities, the elephant has the two upper incisor teeth elongated to form the tusks we know so well, and the hyrax has the two upper incisor teeth elongated in comparison to the rest of the teeth. The elephant has the bottom incisors missing, but the hyrax has a special comb-like structure on its bottom incisors which is used for grooming the fur. The special adaptation of the trunk in the elephant does the job that normal incisors would do, that is biting off food. In the hyrax, the front incisors are too long to be very efficient in this, so they bite and chew with their molar teeth; another adaptation has come in here, that is a blade-like projection on the molars which is used to cut the food.

Mammary glands point to another similarity, with one pair between the forelegs in the elephant and one pair at the front and one at the back in the hyrax. The Dugong also has the mammae situated at the front. As Dr Sale pointed out, in most mammals except primates, when there is only a small number of mammae, these are situated at the back.

Testes again show similarities, in the three groups of the Superorder these are placed internally, just below the kidney. Although this is normal in an aquatic animal like the dugong, it is most unusual in the land mammals.

The fact that Elephants and Hyrax are very unselective in their feeding may be one of the reasons why they have survived so long. With a very wide range of food, changes in climatic conditions mean that they can easily adapt to new food.

Dr Sale then went back to the fossil record and explained that the two families probably came from an animal called *Moeritherium* in the Eocene times. This creature, about the size of a modern cow had a skull 60cm long, and this is remarkably similar to that of the present day hyrax. From this fact stems the question, why, from *Moeritherium* did the elephant grow larger and the hyrax smaller? It is believed that from the cow sized ancestor, the elephant continued to grow because of the abundance of food and the lack of predators. On the other hand, the hyrax was probably the same slow creature that he is today, and when predators arrived he was very vulnerable, and so took to living in caves as a means of protection. Firstly, small holes in rocks are much more numerous than large ones, and secondly, if the entrance to a cave was large enough to admit a cow sized hyrax, it would be large enough to let in a predator. Therefore the hyrax slowly became smaller to escape predation. Dr Sale also noted that in areas where leopard, the hyrax' chief predator are common, they will live in caves with small entrance holes. but in non-leopard areas will live happily in caves with large entrances.

A fact which brought gasps from the members at the lecture was that the gestation period for the hyrax is 7½ months, about the same as that of the Impala, and this is probably a left over from *Moeritherium*. Also the new born are very large, about a quarter the size of the adult.

D.A.

- - - - - - - - - - - - - - -

REQUEST FOR INFORMATION

BREEDING COLONIES OF THE WHITE-FRONTED BEE-EATER AND PIED KINGFISHER:

I am studying the colonial behaviour of the abovementioned two species; if any members could help with information and exact locations of known breeding colonies, with the dates of normal breeding times, I should be extremely grateful for your assistance, please. All sites will be mapped to serve as a basis for an itinary of visits and all records will be acknowledged.

G.R. Cunningham - van Someren,
Box 24947, Karen.

WANTED

East African postmarks especially of the smaller offices, slogan type postmarks, clear parcel type postmarks, meter cancellations, postage due and other postal markings. The absence or presence of stamps is immaterial.

W. Colley,
22 Victoria Road,
Lenzie, Kirkintilloch,
Glasgow, Scotland.

NOTICE

Members are reminded that subscriptions (Sh.50/- full, Sh.10/- junior) fall due on 1st January 1973, and prompt payment saves a great deal of office work.

Secretary.

SOCIETY FUNCTIONS

Monday, 8th January 1973, at 5.15 p.m. at the Museum Hall, Nairobi: Mr G.A. Classen will give an illustrated lecture on "Hunting Succulents in East Africa".

Weekend (12th) 13th and 14th January 1973: Camp at the Arboretum nr. Kericho leaders Mr & Mrs L.A.S. Grumbley, by kind permission of Messrs Brooke Bond Liebeg Kenya Ltd.

Camp will be set up in the Arboretum bordering a dam, which is a bird sanctuary. This locality should offer a good opportunity of seeing western Kenya birds and studying trees, which are labelled in the Arboretum. The highland Mau Forest and the lowland between Kericho and Kisumu are easily reached too.

Campers should be self contained with food, epuipment and drinking water. Washing water and firewood will be available. Trout fishing will be allowed by courtesy of the Kericho Fishing Association. A visit to a tea estate and factory can be arranged for those interested on Saturday 13th January. It is suggested, therefore, that members wishing to take advantage of this offer should travel on Friday or early on Saturday morning.

Owing to the limited space, 17 parties only can be accomodated, if you wish to come, please return the enclosed slip to Mrs A.L. Campbell, Box 14469, Nairobi as soon as possible. Applications will be accepted as they arrive, and a map of the route to the camp site will be sent thereafter.

Monday 5th February 1973, at 5.15 p.m. in the National Museum Hall, Nairobi: Prof. J.W.S. Pringle will give a lecture on "The Flight of Insects", this will be followed by a short film entitled "The Wing Mechanism of the Bee".

Weekend 16th - 18th February 1973: Society camp at Bushwhackers Safari Camp. For bookings, please contact Mrs Stanton, P.O, Kibwezi.

Monday 12th March 1973, at 5.15 p.m. at the National Museum Hall, Nairobi: Annual General Meeting of the E.A.N.H.S.. The meeting will be followed by films loaned by the Royal Society for the Protection of Birds. Details later.

PLEASE NOTE: Wednesday morning bird walks, led by Mrs Fleur Ng'weno are held every week, please meet at the National Museum at 8.45 a.m.

- - - - - - - - - - - - - - -

IMPORTANT NOTICE

Although the Annual General Meeting will not be held until March 1973, members are requested to send their nominations for Office Bearers for the Executive Committee for 1973 as soon as possible.

As far as is known all are standing for re-election, please send your nominations to the Hon. Secretary, Box 44486, Nairobi.

- - - - - - - - - - - - - - -

NEW MEMBERS - JANUARY 1973

Full members:

Mr J.S. Olaleye Ayeni, Dept. of Zoology, Box 30197, Nairobi.
Mrs K.C. Bennett, Box 14157, Nairobi.
Mrs V.V. Bowles, C/o E.A.I.R.O., Box 30650, Nairobi.
Mr T.W. Briddes, Box 21064, Nairobi.
Mr G.W. Frame, Box 6021, Ngorongoro Crater, Arusha, Tanzania.
Mr A. Julian, Box 21148, Nairobi.
Mrs E.F. Julian, Box 21148, Nairobi.
Mr & Mrs P. Ketner, Box 30592, Nairobi.
Mrs R.N. Koine, C/o National Museum, Box 40658, Nairobi.
Mrs K. Rodhe, Dept. of Meteorology, Box 30197, Nairobi.
Mr R. Tucker, Box 30197, Nairobi.
Mr J.W.M. Whiting, C.D.R.U., Box 30197, Nairobi.

Junior members:

Miss Susan Julian, Box 21148, Nairobi.
Miss Sandra Julian, Box 21148, Nairobi.
H. Sanderud, Faculty of Education, Box 30197, Nairobi.

- - - - - - - - - - - - - - -

FOR SALE

Dale & Greenway, Kenya Trees and Shrubs. Offers to Mike Sugg, Agoro Sare High School, Box 10008, Oyugis, S.Nyanza.

Mr A. Abell of Box 25277, Nairobi, has a number of Africana books for sale, members are invited to write to Mr Abell for his list.

He also undertakes a search service and may be able to help you find a particular book you want.

- - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

Editor: Box 29003, Kabete, Nairobi, Kenya

EANHS Secretary: Box 44486, Nairobi, Kenya

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G.C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

CONTENTS

Myxomycetes in East Africa - 14

Boat trip through southern Kenya & Tanzania waters to Mafia Island - 18

Hunting Succulents in East Africa - 20

Camp at the Arboretum, Chagaik Estate, Kericho - - - - - - - - - - - - 22

Library Notice - 22

Letters to the Editor - 23

Reviews - 25

Important Notice - 27

Donation - 27

Society Functions - 27

New members - 28

For Sale - 28

Wanted - 28

MYXOMYCETES IN EAST AFRICA

The Myxomycetes are a delightful group of organisms which are common in the wetter parts of East Africa, but about which very little is known here. They are easy to collect, many species are exceedingly beautiful, and they are of no economic significance. Thus they form an ideal subject for investigation as a hobby. In the last ten years the study of Myxomycetes has become popular among naturalists and amateur mycologists in the U.K., and some species have been used in certain branches of genetical research.

The Myxomycetes, or Slime Moulds, occupy that no-man's-land between the plant and animal kingdoms, usually being treated as primitive fungi. They exist as a multinucleate plasmodium in the assimilative stage. Plasmodia are bounded by only a thin plasma-membrane and are of different types, ranging from minute, static, protoplasmodia to larger forms capable of movement and in which protoplasmic streaming may be easily observed. Plasmodia are often brilliantly coloured and feed on microorganisms and organic debris in soil, leaf litter, or rotten wood, emerging onto a more exposed surface to produce the fruit bodies (sporangia). The change from plasmodia to sporangia can be very rapid (a matter of minutes) but more usually takes several hours, often occurring overnight. Sporangia also are often colourful and may be stalked, sessile, or aggregated into an aethalium, the fruiting structures usually being about 0.5 - 2.0 mm high. Classification rests largely on the structure of the sporangium, the stalk and outer wall of which may often contain much calcium carbonate. Within the mature sporangium there is usually a mass of branching and ornamented threads (the capillitium) which are hygroscopic and twist under the influence of changing moisture content, flicking out the ripe spores when the sporangium wall ruptures. Under suitable conditions a mobile zoospore emerges from the sporangiospore which soon dispenses with flagellate motion and becomes amoeboid. These myxamoebae fuse in pairs and subsequent growth produces the new (diploid) plasmodium, meiosis having occurred during spore formation within the young sporangium.

Good places to look for myxomycetes are logs and stumps so rotten that they offer little resistance to a poking finger, dead leaves, rotten thatch and the bark of trees. They are most common in damp climates and in East Africa the highland forests and old shambas in upland areas are likely to be the best hunting grounds. Many species can be obtained by incubating bark or other suitable substrates in a damp chamber (jam jar with damp blotting paper) for several weeks. Indeed, some species are difficult to obtain in any other way. Plasmodia can also be collected and allowed to fruit in such a container.

Fruiting myxomycetes are collected together with a sliver of their substrate, by which they may be pinned to cork lining the bottom of the collecting tin for easy transport home. When carefully dried, myxomycete specimens can be stored indefinitely in much the same way as an insect collection. Individual specimens are commonly housed in match boxes, the drawers of which are fitted with removable white card trays to which the specimens are glued.

Unfortunately, the most informative works on the myxomycetes are often difficult or expensive to obtain. However, there is a good concise introduction to the subject, with a key to British genera, by Ing (1965) and a general review by Alexopoulos (1963), both of which should be available in many East African libraries. A comprehensive and expensive ($30) work by Martin & Alexopoulos (1969) has recently appeared. A basis for tropical African records is provided by Farquharson & Lister (1916), and a beautiful series of myxomycete paintings were published in colour in the National Geographic Magazine (Crowder, 1926). Farquharson & Lister (1916) do not quote details or localities of specimens for their East African records and many of these could probably be tracked down only by time-consuming personal visits to the large mycological herbaria in Europe and the U.S.A.

I have collected myxomycetes in various places in East Africa when the opportunity has occurred and, in collaboration with Mr P.C. Holland, London (who did most of the determinations), I have so far recorded 12 species, as detailed in the accompanying list. Some of these are reported here for the first time. In the list below the locality is given first, followed by the district, country, date of collection, altitude, notes, and herbaria accession numbers.

MYXOMYCETES RECORDED FROM EAST AFRICA

Arcyria cinerea (Bull.) Pers.

Kabale, Kigezi, Uganda; 6.vi.1970; 1900 m. On rotting papyrus thatch. DLE 129, 136; IMI 151246, 151253 (Ebbels, 1972).

Bunduki, Morogoro, Tanzania; 15.v.1972; 1500 m. Uluguru Mountains; on rotten tree stump. DLE 260, 263; PCH 2855, 2858, det. P.C. Holland.

A. denudata (L.) Wettst.

Kenya. C.A. Thorold 100, det. G. Lister. (Nattrass, 1961).

Kabale, Kigezi, Uganda; 6.vi.1970; 1900 m. On rotting papyrus thatch. DLE 128, 133, 134, 137, 138; IMI 151245, 151250, 151251, 151255. (Ebbels, 1972).

A. ferruginea Sauter

East Africa. (Farquharson & Lister, 1916).

A. incarnata Pers.

Kabale, Kigezi, Uganda; 6.vi.1970; 1900 m. On rotting papyrus thatch. DLE 139; IMI 151256 (Ebbels, 1972).

**A. insignis* Kalchbr. & Cooke

Bunduki, Morogoro, Tanzania; 15.v.1972; 1500 m. Uluguru Mountains; on rotten tree stump. DLE 139; PCH 2856, det. P.C. Holland.

Ceratiomyxa fruticulosa (Meull.) Macbr.

East Africa. (Farquharson & Lister, 1916).

C. f. var. *flexuosa* A. Lister

East Africa. (Farquharson & Lister, 1916).

Comatricha laxa Rost.

Kabale, Kigezi, Uganda; 6.vi.1970; 1900 m. On rotting papyrus thatch. DLE 130, 131, 132; IMI 151247, 151248, 151249 (Ebbels, 1972).

Cornuvia serpula (Wigand) Rost.

East Africa. (Martin & Alexopoulos, 1969).

Diachea leucopoda Rost.

Kenya. C.A. Thorold 99, det. G. Lister. (Nattrass, 1961).

**D. radiata* G. Lister & Petch

Ukiriguru, Mwanza, Tanzania; 21.ii.1972; 1200 m. On living *Tridax procumbens* L. DLE 237; PCH 2851, det. P.C. Holland.

Diderma radiatum Morg. var. *atro-purpureum* Lister

Kenya. C.A. Thorold 97, det. G. Lister. (Nattrass, 1961).

Didymium minus (A. Lister) Morg. (= *D. melanospermum* (Pers.) Macbr. var. *minus*)

East Africa. (Farquharson & Lister, 1916).

Fuligo septica (L.) Web.

East Africa. (Farquharson & Lister, 1916).

Hemitrichia serpula (Scop.) Rostaf.

East Africa. Farquharson & Lister, 1916).

**H. stipitata* (Massee) Macbr.

Ngurdoto Crater, Arusha, Tanzania; 26.vii.1971; 1800 m. On fallen log. DLE 203; PCH 2723, det. P.C. Holland.

Bunduki, Morogoro, Tanzania; 15.v. 1972; 1500 m. Uluguru Mountains; on rotten tree stump. DLE 262; PCH 2857, det. P.C. Holland.

Metatrichia vesparium (Batsch) Nann-Brem. (= *Hemitrichia vesparium* (Batsch) Macbr.)

East Africa. (Farquharson & Lister, 1916).

Perichaena depressa Lib.

East Africa. (Farquharson & Lister, 1916).

Physarum bogoriense Racib.

East Africa. (Farquharson & Lister, 1916).

**P. cinereum* (Batsch) Pers.

Ukiriguru, Mwanza, Tanzania; 4.iii.1970; 1200 m. On lawn grass *Cynodon dactylon* (L.) Pers. DLE 174; PCH 2635, det. P.C. Holland.

P. echinosporum A. Lister

Found at Kew and attributed to Kenya. (Martin & Alexopoulos, 1969).

P. javanicum Racib.

East Africa. (Martin & Alexopoulos, 1969).

**P. nucleatum* Rex

Bunduki, Morogoro, Tanzania; 15.v.1972; 1500 m. Uluguru Mountains; on rotten tree stump. DLE 259; PCH 2854, det. P.C. Holland.

**P. oblatum* Macbr.

Magamba, Handeni, Tanzania; 17.v.1972; 600 m. On underside of rotten log; profuse fructification. DLE 257, PCH 2852, det. P.C. Holland.

P. pezizoideum (Jungh) Pav. & Lag. (= *Trichamphora pezizoidea* Jungh)

East Africa. (Farquharson & Lister, 1916).

**P. pusillum* (Berk. & Curt.) G. Lister

Bwiregi, North Mara, Tanzania; 23.v.1969; 1700 m. On banana leaf debris. DLE 173; PCH 2634, det. P.C. Holland.

Stemonitis fusca Roth.

East Africa. (Farquharson & Lister, 1916).

S. splendens Rostaf.

East Africa. (Farquharson & Lister, 1916).

Stemonitis sp.

Magamba, Handeni, Tanzania; 17.v.1972; 600 m. On underside of rotten log. DLE 258; PCH 2853, to be further investigated by P.C. Holland.

* This is believed to be the first reported record for East Africa.

Herbaria accession numbers. IMI, Commonwealth Mycological Institute.
DLE, D.L. Ebbels.
PCH, P.C. Holland.

REFERENCES:

Alexopoulos, C.J. (1963). The Myxomycetes 2. *Bot. Rev.* 29:1-78.

Crowder, W. (1926). Marvels of Mycetozoa. *Nat. Geog. Mag.* 49:421-443.

Ebbels, D.L. (1972). Additions to the mycoflora of south-western Uganda. *Jl E. Afr. nat. Hist. Soc.* No.133:1-6.

Farquharson, C.O. & Lister, G. (1916). Notes on south Nigerian Mycetozoa. *J. Bot. Lond.* 54:121-133.

Ing, B. (1965). An introduction to the study of the Myxomycetes. *News Bulletin, British Mycological Society*, No.24:13-21.

Martin, G.W. & Alexopoulos, C.J. (1969). The Myxomycetes. University of Iowa Press.

Nattrass, R.M. (1961). Host lists of Kenya fungi and bacteria. Mycological Papers, No.81, Commonwealth Mycological Institute, Kew.

D.L. Ebbels,
Ukiriguru,
Box 1433, Mwanza,
Tanzania.

BOAT TRIP THROUGH SOUTHERN KENYA AND TANZANIA WATERS TO MAFIA ISLAND

A party consisting of Mr & Mrs Pat Hemphill, Alison Hemphill, my wife and I made a trip starting on 9th November 1972 via Tanga, Mziwe, Dar es Salaam, Nyororo, Tutia to Mafia Island and Chole Bay, returning via the northern tip of Mafia, Latham Bank, Dar es Salaam and Tanga.

The main purpose of the trip was a reconnaissance for big game fishing, but it was liberally sprinkled with goggling, bird watching and photography.

Of interest to me, from the ornithological point of view, working chronologically through the trip were the following: MZIWE ISLAND on our second night out; this is a very small coral atoll with a sandbank of about half a hectare with a small grove of Casuarina trees. I thought I heard an Osprey *Pandion haliaetus* calling but on investigation of the trees I could find no Osprey, but I did see a pair of Indian House Crows *Corvus splendens* which I gather, from Pat and Maia, are resident on the island. Also on the island, a pair of Fish Eagles *Haliaeetus vocifer* a flock of Grey Plover *Charadrius squatarola* and a small flock of terns which were, I think, Swift Terns *Sterna bergii*.

The next few days we were busy at sea and not until TUTIA SANDBANK at the southern tip of the Mafia group, did we take note of any birds. On this small sandbank, covering about half a hectare at low tide, were the usual group of terns, a flock of Grey Plovers and an Osprey which had presumably dropped in, as we had, for some fishing. The goggling was superb with a very good selection of Butterfly Fish Chaetodontidae and Squirrel Fish Holocentridae.

One morning, at about 05.30 h, just before dawn in CHOLE BAY, we saw about thirty Greater Flamingos *Phoenicopterus ruber* flying down through the bay in a southerly direction low over the water. They did not look to me as if they were migrating, but gave the impression that they were flying to their feeding grounds. However, we were up early every morning and were there for five nights but did not see them again.

Goggling round the small islands the selection of Butterfly Fish (Chaetodontidae), Wrasses (Labridae), Squirrel Fish (Holocentridae) and Surgeon Fish (Acanthuridae) were only capped by a very good view we all had of a Leopard Trigger Fish *Balistoides conspiculum* and an attendant *Pomocanthus imperator*. On the morning of 22nd November we regretfully turned our backs on MAFIA ISLAND where, in about a weeks fishing, we had three Sail fish ranging from about 27 kg to about 40 kg, several King fish, the biggest up to about 22 kg, Wahoo between about 27 and 31 kg. We caught an assortment of Rock Cod on Honolulu lures, the most beautiful of which was *Cephalopholis argus*, a beautiful pink fish covered with a mass of irridescent blue spots. We left the northern tip of Mafia at about 04.30 h heading in a northerly direction, soon after dawn we met Sooty Terns *S. fuscata* mostly in pairs and in adult plumage flying south. We were followed by at least two White-tailed Tropic Birds *Phaethon lepturus* which also appeared to be heading in a southerly direction but broke off to follow us for a while.

We were in sight of LATHAM BANK by about 10.00 h and by this time the number of birds passing, or heading out to sea had increased in numbers to include the Masked Booby *Sula dactylatra*, a small flock of pratincoles (probably *Glareola ocularis*), and a Phalarope which, I think, was the Grey, *Phalaropus fulicarius*. Also of interest as we approached the island and one could see the bottom i.e. 10 fathoms down (20m), was a large porpoise, not the common Porpoise but one with a very blunt head, who appeared to be on his own.

As we approached Latham Bank, the cloud of birds was visible to the naked eye from about 3 km and gave the impression of smoke rising from the island. At about 1 km the sound of birds was audible over the sound of the surf, and as we anchored the more inquisive Sooty Terns and Noddies *Anous stolidus* flew slowly by us to have a good look to see what we were. The first party went ashore between about 11.00 and 13.00 h and had a good look around. As preparations were being made for this landing party, we saw a small group of Oyster Oystercatchers *Haematopus ostralegus* flying along the shoreline; none of us had seen this species in Kenya waters. During the heat of the afternoon we lazed on board watching the enormous spiral of assortd birds going up into the sky.

While we watched this scene, two very long winged dark birds appeared dive-bombing through the spiral; as they came lower they were clearly recognisable as Frigate birds *Fregata* sp.. They appeared to be dive-bombing for the sake of dive-bombing as the circling column of birds was certainly not returning from fishing. Later on in the evening when we went ashore, we had a better look at this bird at close quarters. After discussion and reference to Mackworth-Praed & Grant, we came to the conclusion that it was the female of the Great Frigate Bird *Fregata minor* as it was definitely very dark on top and below it was white on the throat and chest. Unfortunately, the second bird did not turn up in the evening. We saw this bird dive-bombing the Boobies until sunset and I can only assume that it must have spent the night on the island. Also, on the island in the evening, we saw a small party of Turnstones *Arenaria interpres* and a small family of six or eight very large rats living under the rocks near the derelict hut on the island, presumably these creatures were introduced by *Homo sapiens*.

It was interesting to note that the Terns were flying to the island until nearly 03.00h. Why is it necessary for them to return to the island at 3 a.m.? Do they fish at night or have they been flying back from their fishing grounds for some eight hours? Breeding on the island were, I would say, no more than 200 pairs of Masked Boobies. Their breeding stage seemed to be anywhere from eggs to almost mature chicks. There was one bird with a brown head which, on closer investigation, we considered to be a juvenile *dactylactra* and not the Brown Booby *S. leucogaster* which it appeared to be from a distance. There were also between approximately 200-500 pairs of Swift Terns; the chicks all appeared to be at the samestage of development, about one week old, and I could not find eggs anywhere; there were a number of shells around, pinkish white base with large brown blotches. Dotted around the island were four small colonies of 5 - 10 birds and two large colonies of 50 or more Noddies. It was interesting to note that they kept very much to themselves and made an attempt to build a nest of small stones and bones, all the nests were raised above the ground, albeit by only a few centimetres, but mostly on the rocky promontories on the island. The remainder of the island was virtually taken up by myriads of Sooty Terns, the numbers of which I could not begin to estimate. In a number of areas it was impossible to put your foot down without brushing against a chick or rolling an egg along the sand. Somewhere between 50000 and 100000 birds might not be an unreasonable estimate. Though how many were breeding and how many roosting, I just did not know.

Around Latham Bank and on the way to Dar es Salaam we caught a large Caranx also Wahoo, Sailfish, Yellowfin Tunny, Rock Cod, Baracuda and saw an unidentified Shark, which ate our Wahoo.

All in all it was, to me, a most interesting trip and one which I would want to repeat at a moments notice.

Terry Mathews,
Box 47448,
Nairobi.

HUNTING SUCCULENTS IN EAST AFRICA

ILLUSTRATED LECTURE BY Mr G. CLASSEN

Members who were able to attend this unusual lecture were extremely fortunate for Mr Classen has pursued this fascinating hobby for many years during which he has achieved the tremendous task of bringing together hundreds of live succulent plants from all parts of Kenya to create an unique rock garden on his estate.

East African succulents mostly thrive in arid and semi-arid areas. They all have one basic characteristic in common, namely the amazing ability to remain dormant for months during droughts and until the next rain when they burst into life appearing in full bloom within a very short time. They are extremely diversified in many aspects and belong to many different plant families. Sizes vary greatly and range from the gigantic baobab to minute *Stapelia* species with corallas measuring from 5 mm in diameter. Succulence may occur at the root, in the stem or trunk, as in the baobab, in the leaves as in aloes, while many succulents can dispense with leaves altogether. The adventurous hunter must look for thorny bits in short grass in order to find an euphorbia or a karalluma. A thin green rope seen in dry bushes for instance, may be either a ceropegia or another species of euphorbia, or perhaps the only "cactus species" in East Africa, known as *Rhipsalis* and are quite thornless, and so on.

Of course there is also the possibility of making an unexpected discovery of a new species unknown to science, and in fact some new species found in Kenya have already been named after members of our Society.

Mr Classen showed us his beautiful slides illustrating his hunting grounds in Kenya, areas not often visited by plant lovers. They ranged from the Coast to the northwestern Kenya/Uganda border and over the eastern Kenya/Somali border. Views covered the Kinyang/Karpeddo district, the Baringo district, the Kerio Valley, Marsabit and Maralal regions and slides for Ukambani included the Mtomo Plant Reserve. This reserve, which covers a small mountain with wonderful rocky cliffs, was set aside at the recommendation of Mr Classen and Mr Peter Bally about ten years ago. It is a lovely spot for plant and bird lovers and two bandas are now available for the convenience of visitors.

Other colour slides showed numerous exquisite close-ups of succulents in flower. Thee were craterostigmas (over life-size), stapeleas and karallumas with their rich colouring and gem-like symmetry of corollas. There were shots of the beautiful, ephemeral baobab flowers made of shimmering white satin with a centre tassel bearing grains of gold. We saw desert roses in their scarlet splendour, almost as large as trees, growing either on coral rocks at sea level or up-country in the desert of Baringo district. Euphorbia trees, those "spiny horrors" with their fascinating gold and maroon bead-like flowers running up the edge of branches, were not forgotten either.

According to Mr Classen, the succulent plant hunter needs a well-trained eye, unflinching perseverance and love of hard work. Only then can he hope to make a success of this very rewarding hobby.

J.R.O.

- - - - - - - - - - - - - - -

CAMP AT THE ARBORETUM, CHAGAIK ESTATE, KERICHO

A very interesting camp was enjoyed by some 25 members at Kericho for the week-end of 13th January, at the invitation of Mr L.A.S. Grumbley. The camp was held under particularly luxurious conditions in the Arboretum at Chagaik. This arboretum was started by Mr Grumbley and many of the trees were grown from seed. All are labelled and members interested in trees had a profitable time. The "Kenya Magnolia" *Conopharyngia holstii* was especially conspicuous. tents were pitched on mown grass under some of the trees, and we can only hope that the Kericho climate will soon erase the marks of our wheels on the sward.

Many of the birds as well as the trees were new to most members. Mackinnon's Shrike *Lanius mackinnoni* replaces our common Fiscal Shrike *Lanius collaris*. On the grass, Cape as well as Yellow Wagtails *Motacilla capensis* and *M. flava* and Tree Pipits *Anthus trivialis* were running about. In a hole in a tree by the dam a pair of Waller's Chestnut-wing Starlings *Onycognathus walleri* evidently had a nest and were feeding young.

The weather at Kericho is inconvenient. How else can it be so green and full of beauty, and grow so much tea? On Friday evening the rain did not come down until members had had a chance to look round and watch the evening light on the yellow bills and green speculum of the ducks and the glowing red bills of Moorhens reflected in the water of the dam. In the reeds, a colony of Grosbeak Weavers *Amblyospiza albifrons* (the western race with russet heads) were breeding. The nests were finished and the males were displaying, clinging to the nests and waving their black and white wings. On Saturday evening black clouds made bird watching virtually impossible, and rain pelted down just as we were starting to enjoy the magnificent fire that Mr Grumbley had built for us. However, the mornings were glorious, with light that showed up every feather of the birds drying and preening themselves in the sun after the wet, cold night. On Sunday morning Mr Robin Blake took members for a walk along the forest edge and many birds were seen. The Banded Prinia *Prinia bairdii* sitting and sunning itself was a special treat. White-chinned Prinia *P. leucopogon* were also seen, Buff-throated and Black-collared Apalis *Apalis flavigularis* and *A. pulchra* and the Mountain Yellow Flycatcher *Chloropeta similis* and members had an excellent view of the male and female Purple-throated Cuckoo-shrike *Campephaga quiscalina*.

Mr Grumbley and his staff took a great deal of trouble to make this camp a success, and we are indeed grateful to them.

P.M.A.

- - - - - - - - - - - - - - -

LIBRARY NOTICE

Africana Vol.4 Nos. 3 & 4 are missing from the Library set. Has any member copies of these numbers that he could donate?

- - - - - - - - - - - - - - -

LETTERS TO THE EDITOR

Sir,

"L. S. B. LEAKEY MEMORIAL LECTURE"

I read the letter in the last issue of the *Bulletin*; I quite agree with Mr John Cooper. I think it would be a very good thing if we had a Memorial Lecture once a year on the anniversary of Dr L.S.B Leakey's death.

I also think it would be very nice to have a film about our friend Dr L.S.B. Leakey.

T.S. Edmunds,
(Junior Member),
Box 30197, Nairobi.

Sir,

With reference to the letter from Mr D.H. Round-Turner in the January issue of the *Bulletin*, I would like to confirm that we too have seen such a performance by an elephant.

In September 1972 leaving Ngulia Self-Help Camp for Kitani (both in Tsavo West National Park) we came across an elephant just off the road with its trunk straight up searching for titbits among the higher branches of an Acacia tree. We stopped to watch him and suddenly, with a little dance, he was up on his hind legs to snatch the favourite bit he had selected from the top of the tree. He stayed thus suspended without any visible means of support for his fore legs which remained in the air for a few seconds. Down he came, had a little rest, and then repeated the whole act. On the second occasion he grabbed a high branch with the tip of his trunk, got a good grip on it and dragged the whole lot down with him as he gently lowered his fore legs to the ground.

We were thrilled to see such a performance but did not realise it was so rare until we read Mr Round-Turner's letter.

Mavis M. Heath,
Box 271, Malindi,
Kenya.

Sir,

Referring to the observation of a bull elephant rearing up on his hind legs while feeding, by D.H. Round-Turner *antea* 8-9, I have found the following reference to such behaviour: Sikes (1971, p.53) states that "... in search of palm fruits and high branches, a wild elephant may sometimes be seen in a bipedal stance, reaching far above his head with the trunk ...... cameramen have, in the past decade, actually captured such scenes, and their authenticity in the wilds is now proven (plate 15). Pienaar (1967) described the manner in which cow elephants 'actually reared up on their hind legs and attempted to pluck the helicopter from the air with their trunks' during a cropping programme in which live calves were immobilised by tranquillizer darts ......". A photograph is reproduced showing such an instance, credited to a Martin Isherwood (place not indicated). From the wording quoted above it is clear that such behaviour must be rare. In four years in Tsavo National Park, I have not seen it so far. It would be interesting to know whether such behaviour could perhaps develop as a local tradition, in response to certain feeding conditions.

REFERENCES:

Pienaar, U. de V. (1967). Operation "Khomandlopfu" *Koedoe* 10:158-165 (quoted in Sikes, 1971).

Sikes, S.K. (1971). The Natural History of the African Elephant. London, Weidenfeld & Nicholson, 397 pp.

Walter Leuthold,
Tsavo Research Project,
Box 14, Voi,
Kenya.

Sir,

Members might be interested in a couple of unusual sightings on the Aberdares on 31st December 1972.

Whilst on a trip over through the Aberdare National Park from Nyeri to Naivasha, we stopped at the Gura and Karuru Falls for a picnic lunch. After lunch we returned to the main road and after proceeding for about 2 km our attention was drawn to a young lion about 20 m off the road. Another car had stopped, otherwise I do not think we would have spotted him. He looked in prime condition and seemed to be enjoying the scenery at that high altitude as much as everyone else.

About a kilometre further down the road towards Naivasha we then saw what appeared to be a black Serval Cat trotting along the edge of the road. He jumped up the bank to watch us whilst I hurriedly fitted a telephoto lens; too late, another car came along and the Serval disappeared into the heather.

My wife and I are convinced it was a Serval because of its height, its large upright ears, and its gait.

F.J. McCartney,
Fairview Estate,
Box 168, Kiambu,
Kenya.

Sir,

'KITE" V. BUZZARD

An amusing incident took place at my family's Traditional Christmas Breakfast - four generations of us.

It is always held in the garden; long trestle tables and benches are piled up with presents for everyone, beside their individual places, all very gay and festive. One small boy had, among his gifts, a fine kite, cleverly designed to simulate an Augur Buzzard *Buteo rufofuscus* - size: markings etc.: all correct.

Of course, the kite must have its "proving flight" as soon as breakfast was over, and we all watched it soaring up to a very considerable height, making use of the thermals in a very realistic manner.

Suddenly, 'out of the blue' swooped a real, live Augur Buzzard, which proceeded to 'mob' the impudent intruder who was violating his airspace. The kite continued to soar and dip, with the buzzard still trying to attack. Eventually, we presumed the buzzard's talons touched the kite's string, and alarmed he flew off, probably muttering to himself - "Well, anyhow, that'll "larn' him"!

A very sincere tribute to the designer of the kite!

Mrs E. Polhill,
Box 91, Naivasha,
Kenya.

- - - - - - - - - - - - - - -

REVIEWS

THE PALAEARCTIC-AFRICAN BIRD MIGRATION SYSTEMS by R.E. Moreau.
xvi + 384pp, 31 black and white habitat photographs, 9 text figures, 21 tables, 162 species distribution maps and two endpaper maps.
1972, London: Academic Press. U.K. price £7.80.

This long-awaited book, promised in July last year, published in November, has finally reached East Africa. Its binding is uniform with Moreau's earlier *The Bird Faunas of Africa and its islands* - a nice touch. It is difficult to criticise the new book after reading the Foreward (by Dr J.F. Monk, who saw the work through the printers after Moreau's death) and the Preface: as Moreau himself writes - "I know it is full of imperfections and inadequacies and that readers will find errors from which I cannot be absolved. They will enjoy spotting them but I know too that in not a few places in the book they will find themselves surprised and stimulated".

The reviewer was in constant correspondence with Reg Moreau until his last days, the rush was incredible; even more incredible is the thought that he was also writing to many other people at the same time. In the event, there was just not enough time to sort out everything; Dr Monk has done a tremendous job in tidying up the loose ends but, inevitably, errors and misinterpretations remain which would have been avoided if Reg had lived.

Before describing the book in some detail it will be as well to mention the kind of 'errors' which exist. New information was coming in all the time up until his death; most of this was not published by the finders (there was no time) but Reg was often given "the story so far" and this is usually far from complete. In other cases he misread information from correspondents (poor handwriting, perhaps?). Most of these mistakes will be corrected in the periodic literature in the future, although a revised edition of Reg's book in a few years time would be the perfect answer and one of which I am sure he would have approved.

The first eighty or so pages cover general topics: The sources of the migrants (four chapters) and Africa as a reception area (also four chapters). Next comes one hundred and thirty pages dealing in turn with each species covered, plus short summaries and discussions. This large section is followed by two short chapters on the maintenance needs of migrants in Africa and on recurrence in winter quarters and itinerancy. K.D. Smith has provided an Appendix listing those Holarctic species not treated in the main text. The small distribution maps occupy fifty six pages. Needless to say, when reviewing a contribution by Moreau, the list of References is very full and contains many obscure papers - a great service to other workers in the field. Smith's Appendix has its own three-page list of References.

The book is a 'must' for those ornithologists seriously interested in Palaearctic migrants; it will not answer all their questions but it will enable them to spot some of the gaps in man's knowledge and, hopefully, will stimulate them to work along productive lines. It is arguable whether it should have been published as a book at all; much of the material had already appeared in Moreau's two long *Ibis* papers (1961:373-427; 580-623. 1967:232-259). It is the personal opinion of the reviewer that the work should have formed a special, commemorative issue of *Ibis*; as it is, at £7.80 in U.K. (no doubt nearer £10 in Kenya), the book will be out of reach of many who would benefit from owning it.

G.C.B.

THE ECOLOGY OF INSECT POPULATIONS IN THEORY AND PRACTICE by L.R. Clark, P.W. Geier, R.D. Hughes and R.F. Morris.
Published as a paperback in the "Low-priced Textbook series" by Methuen.
Price in U.K. £0.75.

This book has seven chapters, in which the various theories on insect populations in relation to their environment and their effects on each other are given. The basic idea is first put forward, usually as a direct quotation from the original author of the idea, then gradually through its various stages until the modern interpretation is reached, almost always with quotations from the authors concerned. In the later chapters these ideas are related to a series of insect populations.

The book is very well laid out and, once the terms used in it have been mastered, quite clear in its content. It would have been better to have given a glossary of the terms used at the back of the book instead of the index to the terms, which is all of the same type-face, causing the reader sometimes to look at ten or more pages to find the definition wanted. If the definition page number had been put in a different type-face, it would have made the book much easier to use.

The lay-out is readily adaptable to other groups of animals, and quite a number of the theories in the book are taken from studies on plants, mammals etc. A very full bibliography covering fifteen pages is given at the back of the book.

This is obviously a book for all ecologists, even though it is biased towards entomology. It is well worth the price for the amount of information which is given and is an excellent book for the field ecologist as well as for students.

M.P.C.

- - - - - - - - - - - - - - - -

IMPORTANT NOTICE

The Annual General Meeting of the Society will be held in the National Museum Hall on 12th March 1973, at 5.15 p.m. Nominations for Office Bearers and Members of Committee and notices of matters to be included in the Agenda should be sent to the Secretary, Box 44486, Nairobi before 15th February 1973. As the Secretary, Miss Angwin, is resigning nominations are requested for this position which carries a small honorarium. Miss Allen has agreed to continue as Assistant Secretary and all other Office Bearers and Committee Members are standing for re-election.

- - - - - - - - - - - - - - - -

DONATION

The Society has received a donation of shs.3500.00 from members of the National Audubon Society who visited East Africa last year from the U.S.A. Shs.500.00 of this has been given to the National Museums of Kenya. The remaining Shs.3000.00 will be used to finance publication of the *Journal*.

The Society is extremely grateful to the Audubon members and to Mr Don Turner, who organized their visit.

- - - - - - - - - - - - - - - -

SOCIETY FUNCTIONS

Monday 5th February 1973, at 5.15 p.m: at the National Museum Hall, Nairobi.

Professor J.W.S. Pringle will give a lecture on "The Flight of Insects", followed by a short film - "The Wing mechanism of the Bee".

Saturday 10th February 1973: Afternoon birdwatching in the garden of

Mr and Mrs J. Ball, Karen. Please meet at Karen Dukas at 2.30 p.m. sharp.

Weekend 16 - 18th February 1973: Society camp at Bushwhackers Safari Camp.

For bookings, please contact Mrs Stanton, P.O. Kibwezi.

Monday 12th March 1973, at 5.15 p.m.: at the National Museum Hall, Nairobi.

The Society's Annual General Meeting followed by films loaned by the Royal Society for the Protection oc Birds.

Weekend 16th, 17th and 18th March 1973: Camp at Thiba Fishing Camp, nr. Embu. Leaders Mr and Mrs Standish King. Details next issue.

Monday 9th April 1973, at 5.15 p.m.: at the National Museum Hall, Nairobi. Mr E.T. Monks will give an illustrated lecture on "Poisons & Poisoners".

- - - - - - - - - - - - - - -

NEW MEMBERS - FEBRUARY 1973

Full members:

Dr D.E. Brooke, Box 30125, Nairobi.
Prof. H.M. Cameron, Box 30588, Nairobi.
Mrs E.M. Griffin, 81 Firswood Avenue, Ewell, Surrey, England.
Mr A.J. Holcombe, M.A., M.B.O.U., 7 The Ridgeway, Tonbridge, Kent.
Mr Robert Hooker, Box 30183, Nairobi.
Mr W.N. Kenrick, c/o Mowlem Construction Co., Box 30078, Nairobi.
Miss S. MacIntyre, Box 40469, Nairobi.
Mr J.M. Melack, Box 40469, Nairobi.
Mrs A.P. Moore, Box 48451, Nairobi.
Mrs Bruce Scott, Box 42878, Nairobi.
Dr Nils Tarras-Wahlberg, Science Teacher's Training College, Box 30596, Nairobi.
Mr J.W.M. Whiting, C.D.R.U., Box 30197, Nairobi.

Junior members:

Stephen Bamlett, Box 30151, Nairobi.
Paul Bridgland, Ngulia Safari Lodge, P.O. Mtito Andei, Kenya.

- - - - - - - - - - - - - - -

FOR SALE

One Mvule Butterfly Case. 16" x 40", 26 drawers, will hold over 1000 specimens. Shs.750/-. Contact John Bowes, Box 140, Eldoret, Kenya.

WANTED

Could any member give or lend a desk, large or small, with drawers, for the use of the Society's Secretary?

Mr Bernhard Robel, a German zoologist, is looking for accomodation (care-taking, guest-house etc.) in or around Nairobi for three months from 1st February 1973.

- - - - - - - - - - - - - - -

QH
7
E135
S.I

EANHS

BULLETIN

Editor: Box 29003, Kabete, Nairobi, Kenya

EANHS Secretary: Box 44486, Nairobi, Kenya

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G.C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

E.A.N.H.S. BULLETIN MARCH 1973

CONTENTS

A record of the Purple-throated cuckoo-Shrike - - - - - - - - - - - - - - 30

Fishes of the Kenya Reef - VI - 31

Mechanical Pathology in the shoulder of a bird - - - - - - - - - - - - - 38

Two new breeding records for Kenya - - - - - - - - - - - - - - - - - - - 39

Unusual seabird records off Watamu - - - - - - - - - - - - - - - - - - - 39

Nairobi National Park game count - 40

Reviews - 41

Letters to the Editor - 43

Camp at Bushwhackers - 44

Society Functions - 45

New members - 46

Accomodation - 47

A RECORD OF THE PURPLE-THROATED CUCKOO-SHRIKE *CAMPETHERA QUISCALINA* IN THE ARABUKO-SOKOKE FOREST

On 5th January 1973, when in the Arabuko-Sokoke Forest, I saw several males and one female of a cuckoo-shrike which apparently can only be the Purple-throated Cuckoo-Shrike *Campethera quiscalina*. They were with a party of other insectivorous birds feeding quite low down in the branches of a *Brachystegia* tree, and were viewed in full sunlight at a range of less than 25m through X 12 binoculars. At one stage a male and a female perched together about 30cm apart on a bare twig. The almost plain olive-green back and yellow underside of the female at once struck me as quite different from that of the female *Campethera phoenicea*, which is also barred beneath, and which I see regularly near my house at Karen. The female seen in the Arabuko forest did not have a particularly grey head, as shown in Pl.74 of Mackworht-Praed & Grant, Vol.2. However, I have since checked specimens of this cuckoo-shrike in the National Museum and remain convinced that this was the species seen. Some females of *C. phoenicea* have less strongly marked backs than others; but all are more or less strongly barred with black beneath, which was not the case in the suspected female *C. quiscalina* at Arabuko. The males, of which there were at least three with this one female, were all black, showing no tufts; however, as these are not always seen in other male black cuckoo-shrikes, this is not necessarily good confirmation of the species concerned.

While remaining myself convinced that this was the species seen, after careful checking with skins in the National Museum and other sources, this would represent an extension of the known range of *C. quiscalina* by several hundred kilometres, and a great difference of habitat, since it is normally a highland species in Kenya. A.D. Forbes-Watson, who has studied the Sokoke Forest thoroughly, tells me that he has never seen or collected it there. However, there have been so many surprises from this forest in recent years that I think this record worth mentioning, though evidently it requires confirmation by a specimen.

Leslie Brown,
Box 24916, Karen.

ANNUAL GENERAL MEETING

Members are reminded that the Annual General Meeting of the Society will take place on 12th March 1973, at the National Musem Hall, Nairobi at 5.15 p.m.. The meeting will be followed by films, 'The Snowy Owls of Shetland' and 'The Kinfisher', loaned by the Royal Society for the Protection of Birds through the British Council, Nairobi.

FISHES OF THE KENYA REEF - VI:

CHAETODONTIDAE, THE BUTTERFLY FISHES

The Chaetodontidae or Butterfly fishes are among the most gracefully agile and attractive of reef fish and as a family are unmistakable. All have a slim, pointed snout; the mouth has fine bristle-like teeth, a characteristic which gives them their family name (chaeta, a bristle; -odon, teeth.)

The pointed snout is presumably an [illegible] the particular feeding habits of the family, food is solemnly inspected, and then daintily picked out of crevices and crannies in the corals. I have not studied closely what the food is, but suspect, among other things, the inevitable small crustaceans and, possibly, certain algae or small coelenterates. I have once observed Butterfly fish eating small sea anemones. In two genera, *Chelmon* and *Forcipiger*, the snout is elongated and tubular; these are conveniently known as the long-snouted butterfly fish.

Butterfly fish do not grow to a large size; few attain 30cm (*Chaetodon lineolatus* may, and is probably the largest species) and adult specimens generally vary between 15 and 23cm.

Most species conform to a standard family shape, and are mainly distinguished by markings. All have a vertical eye stripe, almost invariably black. Although at first sight they appear a bewildering group, species are easily recognisable, provided one has done some homework on body markings and colour.

A few species exhibit marked differences between juvenile and adult forms. *Chaetodon lunula* juveniles are the most likely to be encountered and I have illustrated the differences for this species.

I have attempted to indicate in the diagrams the main recognition marks of each species; a summary here will not come amiss. A total of 22 species might be encountered in our area; 20 are illustrated and described.

Of these, 3 are very easily recognised; the two long-snouted Butterfly Fish, *Forcipiger longirostris* and *Chelmon rostratus*, and the Coachman, *Heniochus acuminatus*.

Of the 17 species of *Chaetodon*, 16 may be usefully divided into 2 colour groups; those having a *body* colour yellow, orange or brown (7 species) and those with a white, greyish or silver-grey body (disregarding the fins, which are generally orange or yellowish.) The seventeeth species, *C. meyeri*, has a spectacular blue body with unique markings and cannot be mistaken for any other.

Having placed an unknown Chaetodon into the "yellow" or the "white" group a careful mental note should be made of the following:

(1) presence or absence of narrow, often black, lines, and their arrangement (vertical, horizontal, diagonal, V-shaped)

(2) presence or absence of black *bars* (as opposed to lines)

(3) presence of a large black spot (ocellus) on the *body* (3 species only, [illegible] *unimaculatus*, *zanzibarensis*, *bennetti*)

(4) presence of small definite spots on the body (2 species only, *kleini* and *guttatissimus*.)

There remain two other species which I have not illustrated. *Heniochus monoceros* is essentially similar to *H. acuminatus*, the Coachman, but in this species a small horn develops on the head with age. *Hemitaurichthys zoster* is apparently rare; the body is divided more or less equally into 3 bands, the middle band being light coloured and the other two dark. I have never observed either along the Kenya coast, but both are recorded from the Seychelles and there is no reason why they should not occur here.

In the recognition notes of the species I have indicated whether they are apparently rare, common or abundant. These obviously may not be correct for all the areas of the coast, and a species I have labelled as rare or uncommon may be locally, or seasonally, common, or even abundant.

Ken Bock,
E.A.A.F.R.O. (Mugaga),
Box 30148, Nairobi.

CHAETODONTIDAE - BUTTERFLY FISHES

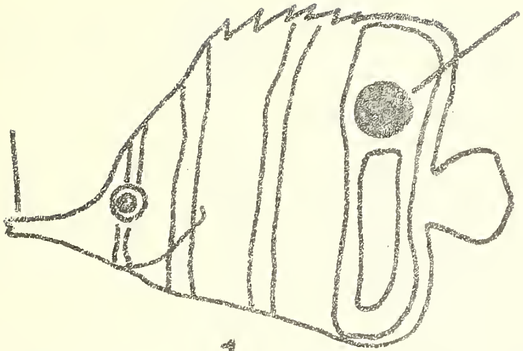
1. *Chelmon rostratus*. Snout elongated, tubular; body silver, with four reddish brown vertical bars lined blue; black ocellar spot with pale blue halo. One record; Kisiti Island.

2. *Forcipiger longirostris*. Snout elongated, tubular; body bright yellow or yellow brown without vertical bars; upper half of head black, lower half of face, breast and snout white. Small black ocellus on fin below tail. ? Uncommon.

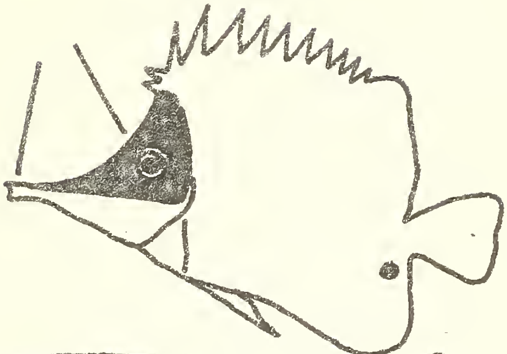
3. *Heniochus acuminatus*. (Coachman) Great elongation of 4th dorsal fin spine to form a pennant; body silvery-white, with 2 broad diagonal cross bars. Unmistakable. Common, often abundant, in shoals.

4. *Chaetodon meyeri*. Complicated, flowing pattern of black lines on blue body; body extremities yellow. Only blue-coloured Chaetodon in our area. Unmistakable. Uncommon.

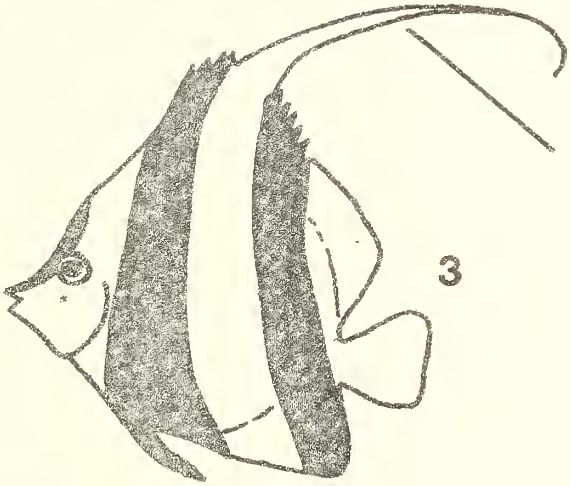
5. *C. guttatissimus*. Pale coloured, silver or with yellowish hue; numerous small black spots on body. Distinctive eye stripe, pale centre, black border. Unmistakable. Recorded at Diani and Kasiti Island.



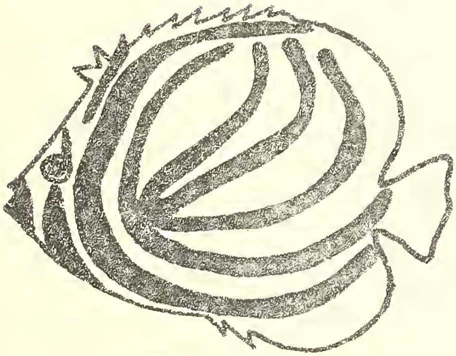
1



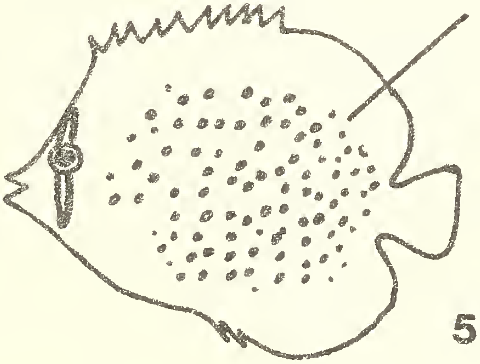
2



3



4



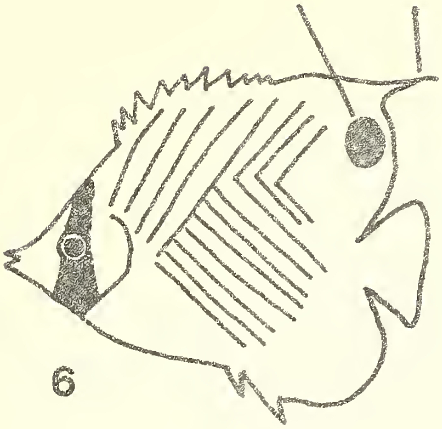
5

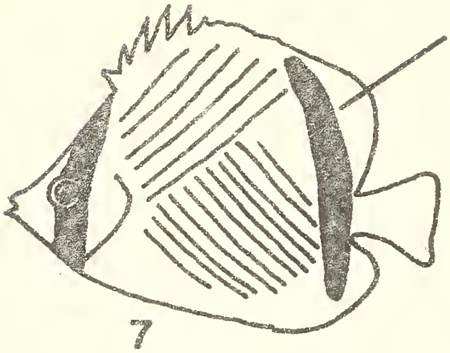
CHAETODONTIDAE - BUTTERFLY FISHES

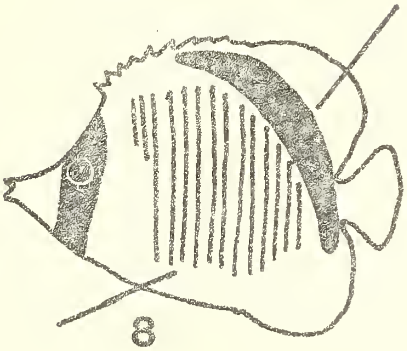
BODY COLOUR WHITE, SILVER OR GREYISH

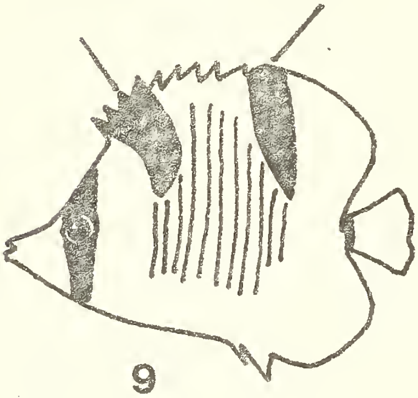
6.	*Chaetodon auriga.*	Body white with 2 groups of diagonal bluish black lines set at right angles; soft dorsal and anal fins orange. Black ocellus on soft dorsal; 5th. 6th, or 7th ray of soft dorsal *filamentous*. Common.
7.	*C. vagabundus.*	Body whitish to silvery grey with 2 groups of diagonal lines set at right angles; soft dorsal and anal fins orange. Curved black *bar* from soft dorsal to anal fin. Common, often wandering about the lagoon far from coral.
8.	*C. lineolatus.*	Body silvery grey with numerous *vertical* black lines; black bar below soft dorsal; broad black eye stripe. Attains at least 30cm, probably the largest species.
9.	*C. falcula.*	Body whitish with vertical lines; two roughly triangular black bars on back, one at front and one at rear of spiny dorsal.
10.	*C. xanthocephalus.*	Body bluish-grey to silver with 6 slightly curved vertical lines; dorsal and anal fins orange. Head, snout and breast orange in juvenile; lower part of head and breast orange in adult. Eyestripe narrow, not extensive. This fish often appears to have a characteristic steep "slope" to its back along the soft dorsal.
11.	*C. chrysurus.*	Body white with dark V-shaped lines directed forwards; rear part of body, dorsal and anal fins brilliant orange. Rare.
12.	*C. trifascialis.*	Body silvery grey with numerous V-shaped lines directed forwards; soft dorsal ends in a point; eyestripe broad. Common at Kisiti.
13.	*C. leucopleura.*	Body white or greyish, few horizontal red lines on belly and red spots on breast; fins yellow. Uncommon. Seen at Diani only.

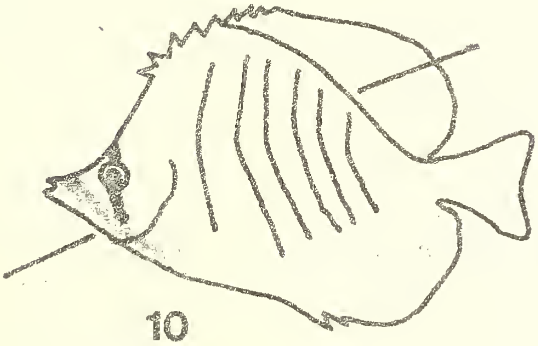
CHAETODON: body colour white, silver or greyish

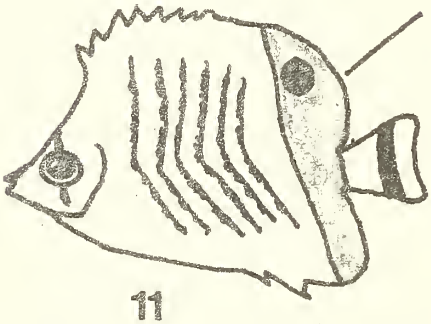

6

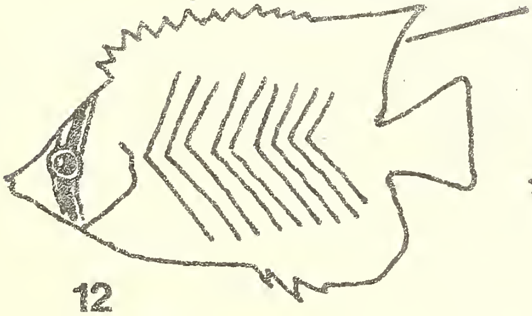

7

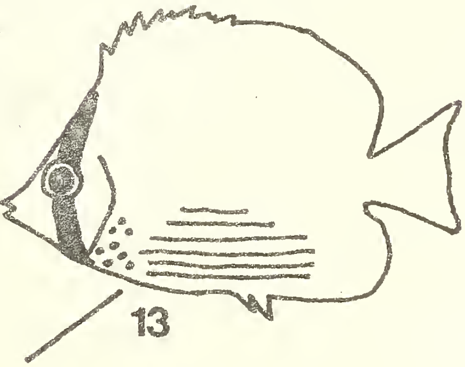

8


9


10


11


12

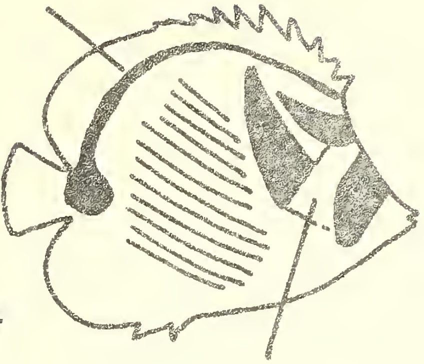

13

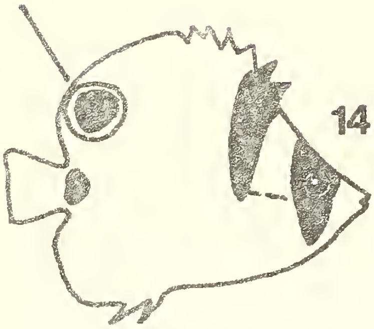
CHAETODONTIDAE - BUTTERFLY FISHES

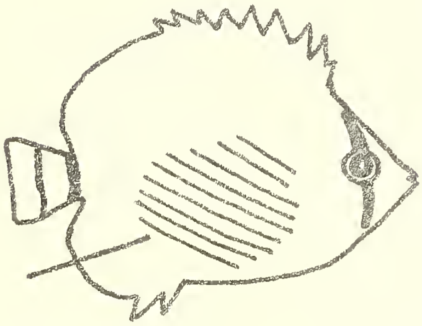
BODY COLOUR YELLOW, ORANGE OR BROWN

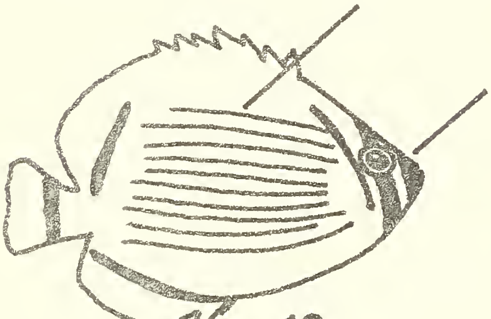
14, 14a.	*Chaetodon lunula.*	Body rich orange brown with diagonal reddish stripes; reddish spots on breast. Pure white area behind eyestripe, then 2 large curved black marks as indicated. Black stripe along back below dorsal, ending in a blob at base of tail. Juveniles without this stripe; instead a black ocellus with pale orange halo on soft dorsal. Unmistakable, common, often locally abundant. Juveniles in reef and rocky shore pools. Smith describes this fish as "a disc of molten gold."
15.	*C. melanotus.*	Body yellowish, with bluish black diagonal lines and dots; black bar at base of tail.
16.	*C. trifasciatus.*	Characteristic shape; snout not pointed as in other Chaetodons. Body rich orange yellow, with *horizontal* brownish-red lines. Black below soft dorsal and anal fins. Three black bars on head; at extremity of face, the eyestripe, and a third behind the eye. A gloriously attractive fish, often in pairs. Common at Kisiti.
17.	*C. zanaibarensis.*	Body yellow; large black ocellus.
18.	*C. unimaculatus.*	Body yellow; large black ocellus; distinguished from *zanzibarensis* by black edging to rear of dorsal and anal fins, and black bar at tail base.
19.	*C. bennetti.*	Body yellow; black ocellus with blue halo; 2 bluish stripes as an inverted V from behind eye to anal fin. Eyestripe edged blue.
20.	*C. kleini.*	Body yellowish-brown, with numerous distintive small *white* spots. Snout black; rear of dorsal and anal fins edged black.

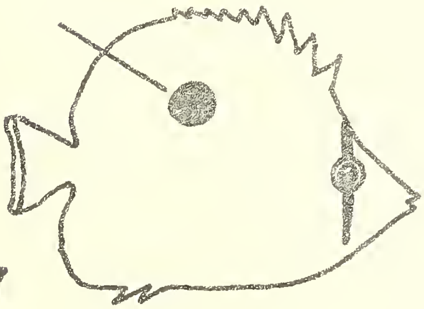
CHAETODON: body colour yellow, orange or brown

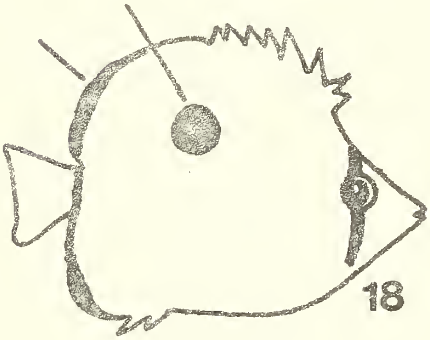

14

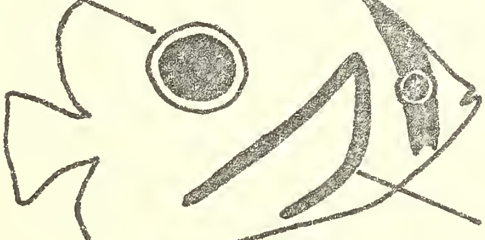

14*a*

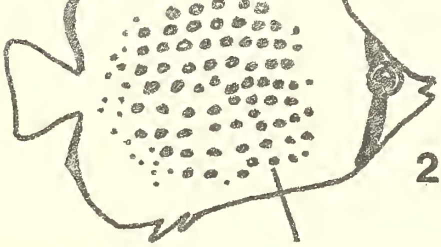

15


16


17


18

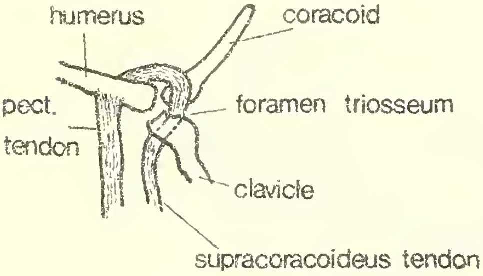

19


20

MECHANICAL PATHOLOGY IN THE SHOULDER OF A BIRD ILLUSTRATING ITS MECHANISM OF ACTION

For five months a Ground Hornbill *Bucorvus caffer* was seen unable to fly near the Miombo Research Centre in the Selous Game Reserve, SE Tanzania. One wing could flap but the other only remained folded at its side. Expecting to find interesting pathology, the bird's precarious existence was terminated.

Turning the bird on its back, it was noticed that the non-moving wing would open and spread as easily as the normal one. The examination of the shoulder joints revealed a normal left one with smooth glistening articular surfaces and a pathological right one, with fibrous inflammatory tissue adhering to the joint components. The explanation of this immobilization may be understood by knowledge of the mechanism of the wing function.



The figure shows how the tendon of the supracoracoideus muscle passes through the foramen triosseum to be inserted on the upper surface of the humerus; contraction of this muscle raises the wing (even though the muscle is situated below the wing).

Although the supracoracoideus would contract normally, the fibrous inflammatory tissue would prevent the tendon from moving in the foramen triosseum to elevate the wing. The joint's mobility would not be impaired however, if, as in this case, the fibrous tissue was not enough to fuse the joint, which is why the wing was easily opened by forces other than the bird's own.

The examination also revealed an abscess in the lung. If the pathology originated in the joint and organisms entered the blood stream the first capillary bed to be encountered would be the lungs. Or, as the synovial membrane of a joint is also a capillary bed, organisms in the blood from elsewhere may have localised here as well as in the lung.

Bob Gainer,
Miombo Research Centre,
Selous Game Reserve Project,
Box 25295,
Dar es Salaam.

- - - - - - - - - - - - - - - -

TWO NEW BIRD BREEDING RECORDS FOR KENYA

Wattle-eye *Platysteira cyanea*

On 30th May 1971, I found a nest of this species by the Ikuywa River in Kakamega Forest. The nest was a very small cup of fine grasses and flat lichens on a hanging branch at a point where it trifurcated about 7m above the ground. The contents could not be examined, but the female was sitting. On 13th June I saw a pair of adults in the vicinity of the nest, but saw no evidence of juvenile birds.

Whistling Cisticola *Cisticola lateralis*

On 24th May 1970, in a grassy glade on the north western edge of Kakamega Forest I saw two juvenile *C. lateralis* accompanied by a small group of adults. They differed from the adults in having stumpy tails, and being rather reddish above. They called constantly as they fluttered from bush to bush and were occasionally fed by one of the adults. On the same day, a few hundred metres away, I found another group containing two completely grown juveniles.

There is an earlier, unpublished, breeding record for Kenya, viz. an incompletely grown juvenile, weight 12.0g, wing 52mm netted at Ng'iya on 13th July 1969 by P.L. & H.A. Britton.

C.F. Mann,
Box 337, Kapsabet,
Kenya.

UNUSUAL SEABIRD RECORDS OFF WATAMU, KENYA

Audubon's Shearwater *Puffinus lherminieri*

On 31st December 1972, when fishing about 3.5km out to sea from the mouth of Mida Creek, a single shearwater was observed flying round other seabirds attending shoals of Tunny *Euthynnus* sp. Good views were obtained of the bird in flight, showing the white underside clearly. Later, it settled on the water, and allowed us to drift gently to within 5 metres of it before taking wing. On this occasion all the distinguishing features of this shearwater were visible with the naked eye. In flight it could be distinguished from a possible Dusky Shearwater *P. assimilis bailloni* (which is recorded at Seychelles but not off the East African coast by Praed & Grant) by the dark underwing coverts. A white ring round the eye and a whitish streak on the side of the head were clearly visible in the bird on the water. There therefore seems little doubt that this was a Audubon's Shearwater, of which there are, I believe, only two other Kenya records, one of them obtained at the base of the Limuru television mast, and now in America.

It is possible that more than one individual was present on 31st December, since several times one was seen flying; they may have all been the same bird coursing over the same area of sea, however. Another individual, less likely to have been the same bird, was seen on 6th January 1973, in roughly the same area, but rather further north and a kilometre or so more out to sea, again associated with other seabirds following shoals of Tunny.

Brown Booby *Sula leucogaster*

On 3rd January 1973, in the same general area about 3.5km off the mouth of Mida Creek, a single adult Brown Booby was seen at a range of about 200m. I am thoroughly familiar with this species elsewhere in tropical seas. The solid dark brown breast distinguishes this species in adult plumage from any possible confusion with the immature of *S. dactylatra*. This is the first time I have seen species of booby offshore when fishing from Watamu.

Little Tern *Sterna albifrons*

In view of the rather scarce definite records of Little Tern on the Kenya coast (Britton & Brown, in prep.) it seems worth recording four or five seen on the evening of 5th January 1973 in Mida Creek. I have previous records of this species from Mida Creek, and, as on all other occasions when I have seen this species, they were fishing at the very edge of the rising tide, as the water welled into the hollows in the sandflats and presumably caused certain small fish to become active. They disappeared after a short time, and were in view for only about a quarter of an hour, fishing in various places where they presumably caught their immediate needs.

Larus spp. undet.

There has recently been controversy over the identification of small gulls, either *L. genei* or *L. ridibundus* off the East African coast. In August 1972 I saw several small gulls which, at a distance of less than 100 metres with X 12 binoculars, but in rough seas, I was convinced were *L. genei*. In December 1972 and January 1973, on the fishing expeditions in the course of which the shearwater and booby were seen, I saw large numbers, possibly 200, of a small gull which appeared, without doubt, to be *L. ridibundus*.

The descriptions of winter plumage of both these gulls in Praed & Grant are of little help; but from Archer & Godman (The Birds of British Somaliland and the Gulf of Aden, 1937) it appears that the Slender-billed Gull always has an entirely white head when adult. However, the matter can only be satisfactorily settled by collecting a specimen, which could easily be done off Watamu in December.

Leslie Brown,
Box 24916, Karen.

- - - - - - - - - - - - - - -

NAIROBI NATIONAL PARK GAME COUNT

The Warden of Nairobi National Park would be glad to hear of Volunteers to be put on the reserve list for game counts. These counts take place on the last Sunday of each month, i.e. March 25th, April 29th, May 27th, June 24th, July 29th, August 26th, September 30th, October 28th, November 29th, December 30th. Those counting use their own vehicles, and normally work up to lunchtime, depending on the number of animals in a particular area. Volunteers would be informed by telephone if they were required for a particular count. Anyone willing to take part should inform the Warden, Box 42076, Nairobi.

- - - - - - - - - - - - - - -

REVIEWS

THE GARDENERS OF EDEN by A.D. Graham. 246pp., 16 black and white photographs. 1973, London: George Allen & Unwin Ltd. U.K. price £4 (80/- to 88/- in Nairobi bookshops).

The gardeners of the title refers to conservationists, and the book is an attempt to show that conservationists of every degree, whether professionals such as Game and Park Wardens, or 'nature lovers' are really what they are through "a manifestation of intense hatred". As a bird-watcher myself, I find it most interesting to discover that I watch birds because of their "potent sexual symbolism" (p.167). As a layman in the field of psychology I am utterly unable to criticise such reasoning but, having a certain knowledge of bird-watchers, I would think it a gross oversimplication to suggest that their motives are identical. One suspects, therefore, that much of the rest of the book may be over-simplified, and it certainly seems that many of the data presented in it are biased to fit into the author's argument. Indeed, a psychologist analysing this text would surely discover much about the author. For instance, what motive caused it to be written in the first place?

It can be seen then, that this is a controversial book, and any review can only be from a very personal viewpoint, therefore it should be judged by each reader individually. The high price will no doubt put many people off buying their own copy, but the Natural History Society Library will have the review copy available to members.

The theme of man's antagonism to animals becoming love and protection for them is developed through ten chapters: For whom the wilderness?: In the pride of his grease: Cinderella: Valkyrie: In the beginning was the deed: The Mowgli complex: Tall ho!: The oracles of Delphi: Strawberry fields for ever: The garden of Eden. Other examples of this sort of labelling can be found in the index: Cinderella syndrome: Death Row complex: Gamekeeper's chorus: Great Game Animals: Limpid Eye Index. To me this 'clever' writing obscures some genuinely good points; one example will suffice. From p.198 onwards, after a cutting description of 'professional game savers' (much of it only too true of *certain*, but by no means all, of them), we are taken on an imaginary tour of a National Park. Graham's justifiable criticisms of the *DO NOT* signs etc. lose their impact through the ridiculous lengths his fantasy takes him.

Many will feel that the extracts from Game Department annual reports etc. are quoted out of context and, as many of the authors are still alive, it would only have been a courtesy to get their present views. For instance, that grand old man Capt. C.R.S. Pitman, first Game Warden of Uganda, rates nearly a whole chapter ("Valkyrie"), and to my mind should certainly have had a say (if he had wanted one!) in the present work.

As I have said, the author has some genuinely valid points, but I found the book hard to read or 'get in to', with the chapters too long and the facts too often obscured by the very personal sidelights and interpretations which broke the thread of the argument.

When my friend Alistair Graham asked me to review this book for the *Bulletin* I suspect he knew that it might take this form - *I* suspect he will be pleased that at least one reviewer has been a little provoked! His analysis of me based on this review would be appreciated.

A.D. F-W.

KENYA'S NATIONAL REPORT TO THE UNITED NATIONS ON THE HUMAN ENVIRONMENT
Available from the Ministry of Natural Resources, Box 30126, Nairobi .
No price given. ix + 103pp, paper cover.

This report was prepared as part of Kenya's contribution to the United Nations Conference on the Human Environment in 1972. Data were obtained both from published material and from information supplied by many experts within Kenya.

The first part of the report covers three aspects: Human settlement, Natural Resources and Pollution. Each aspect is explained in depth and the difficulties and problems that are facing Kenya are outlined. Even though the information consists mostly of facts, figures and tables they are easily understood; and often conveys, as only a factual account can, a chilling picture of how some of Kenya's natural resources are rapidly disappearing. Some of the figures are startling to a layman, such as the loss of up to 1,000,000 tons of topsoil (an admittedly high figure) a day, through individual rivers; also every year an average of 6,000 hectares of forest reserve is officially converted to agricultural settlement.

Part two of the report deals with past and future actions to control the problems outlined in the first part. It is very reassuring to find that at the planning level remedies have been suggested or in some cases, implemented for most of the stated problems. However, although the remedies are often studied in depth many of them remain just studies; the report emphasises that Government legislation, intense research and the input of both finance and manpower are essential. The report also emphasises that these problems should be tackled *now*, and not left for future generations when the cost of restoring the environment could be enormous.

However, I found the report encouraging in that the Kenyan Government obviously realises the dangers and has no wish to see its country emulate some of the polluted and environmently despoiled developed countries. One can only hope that it manages to succeed.

One last point is that the cartoons by Terry Hirst are a surprising and welcome inclusion; they often sum up the problems involved more succintly than a wealth of data could.

W.P.H.D.

LETTERS TO THE EDITOR

Sir,

In the January 1973 *Bulletin* I noticed an article about an attack on a giraffe and calf by a lioness in which it is mentioned that the giraffe roared, I have never heard a giraffe use any voice, and always understood they couldn't.

Miss Mary Rickman,
Pioneer Ward, Nairobi Hospital,
Box 30026, Nairobi.

Sir,

With reference to Mr D.H. Round-Turner's letter in the January issue of the *Bulletin*, and to the follow up letters in the February issue.

Dr L.S.B. Leakey in his National Geographical Society book "Animls in East Africa" has a photograph (p.35) of an elephant partially rearing up on its hind legs while feeding.

Jean Brown,
National Museum,
Box 40658, Nairobi.

Sir,

On 11th February 1973, while bird-watching near Small Momela Lake in the Arusha National Park, I saw what I believe was an Eleonora's Falcon *Falco eleonarae*.

I was standing 30m from the lake-edge when this unfamiliar looking falcon flew past me, low along the shore. It swooped up, twisting and turning as if hawking for insects, but then I noticed that it was carrying what appeared to be a small bird. It continued on, low over the shoreline, until it flew out of view behind a small hillock. A minute later it reappeared again briefly about 100m from me still carrying the bird.

Although it could not have been in view for more than a minute I had good views of it, since it was late afternoon with the sun behind me and I was using a good pair of 8 X 30 binoculars.

The following is a description of this falcon. It was Peregrine sized or possibly larger, but much slimmer, the wings being narrower and longer and the tail very noticeably longer, in fact, in shape (but not in size) it resembled a kestrel and had the more liesurely, shallow wingbeats interspersed with a short glide so typical of a kestrel.

The upperparts were a uniform dark blackish brown and the cheeks were very noticeably white. As I was above the bird, I was unable to see the underparts.

I may have mistaken this bird for a Lanner Falcon *Falco biarmicus* which is also a large slim falcon, but the Lanners I have seen have given a patterned appearance above with the pale brown head and tail which is barred and the dark brown wings and back.

Leslie Brown, in his book, "African Birds of Prey' notes that Eleonora's Falcon may move inland on migration to feed on the insects that emerge after a rain front has passed. So it may be of interest to note that a large storm had passed an hour or so before my sighting.

Colin Corfield,
c/o L.D.E.F. Vesey-Fitzgerald,
Arusha National Park,
Box 3134, Arusha,
Tanzania.

Backhurst, Britton & Mann (in press, 'The less common Palaearctic migrant birds of Kenya and Tanzania') give a resume of the status of this species which breeds very late in the year in the eastern Mediterranean and winters in Madagascar. The above mentioned authors could give only two records for the two countries; it is recorded in the Ruaha National Park, Tanzania by Williams (1967, A Field Guide to the National Parks of East Africa), according to the Warden, J. Savidge, in December, and once from near Arusha in January 1971 (J.G. Williams *in litt.*).

Ed.

- - - - - - - - - - - - - - -

CAMP AT BUSHWHACKERS

About 45 members and their families took part in this camp. Old members know that they cannot be disappointed in Bushwhackers and this meeting served as an introduction to some new ones. Rain had refreshed the vegetation and brought up the river. On one occasion no less than 10 crocodiles were counted and on another, 3 Hippo were seen. A Little Ringed Plover *Charadrius dubius* was spotted and Three-banded Plovers *C. tricollaris*, Greenshank *Tringa nebularia*, Common and Green Sandpipers *T. hypoleucos* and *T. ochropus*. At one point the largest of the Herons and one of the smallest, the Goliath *Ardea goliath* and the Green-backed *Butorides striatus* could be seen together. There was much activity on land too. The young of Von der Decken's and the Red-billed Hornbills *Tockus deckeni* and *T. erythrorhynchus* were out of their holes and being fed at the bird tables, begging with the same hunger calls that lately issued from the holes. A Yellow-billed Hornbill *T. flavirostris* was seen by some of the party; this bird is now unfortunately rare in the neighbourhood. Stripe-breasted Sparrow Weavers *Plocepasser mahali*, Grey-headed Sparrows *Passer griseus* and Superb Starlings *Spreo superbus* were all being followed about by big young. Five species of Kingfisher were seen and one member found the nest hole of the Grey-headed *Halcyon leucocephala*. Another member noticed the beautifully woven nest of the Black-necked Weaver *Ploceus nigricollis* in a tree just outside the common-room banda right in the middle of the camp. This is a new bird for the Bushwhackers list.
It seems curious that neither this nor the Red-headed Weaver *Malimbus rubriceps* which also breeds in the camp, come to the bird tables, although these

are very close to their nests.

By special permission, a visit was paid on Sunday morning to the dam on the DWA Estate. This represents a different habitat and another 22 species were recorded, the Broad-billed Roller *Eurystomus glaucurus* and the Trumpeter Hornbill *Bycanistes bucinator* being particularly conspicuous. We always enjoy Bushwhackers with its friendly atmosphere, and hope to invade it again soon as a body. Many members will, no doubt, be revisiting it meantime in a private capacity; the address to write to (as most of us know) is Mrs H.R. Stanton, Bushwhackers, P.O. Kibwezi.

P.M.A.

- - - - - - - - - - - - - - -

SOCIETY FUNCTIONS

Monday 12th March 1973, at 5.15 p.m. at the National Museum Hall, Nairobi:

The Society's Annual General Meeting followed by films; "The Kingfisher" and "Snowy Owls of Shetland" loaned by The Royal Society for the protection of Birds through the British Council, Nairobi.

March 16th - 18th 1973: Weekend camp at Thiba River Fishing Camp on the southern slopes of Mount Kenya, altitude approx. 1900m, leaders Mr & Mrs Standish King. Camping will be at the forest edge under large shade trees. Washing water and firewood will be available, but please bring drinking water. There will be a small camping fee. The space is limited and the number will be restricted to 17 cars. All campers (including children over 10 years) must hold a valid Kenya fishing licence (5/- for a weekend obtainable from the Fisheries Department, next door to National Museum) and there may be a further small charge for wood and water. Interest: Forest birds, indigenous forest, plants etc.

If you wish to come, please send the enclosed form to Mrs J.Standish King, Box 40058, Nairobi. Route map will be sent.

Monday 9th April 1973, at 5.15 p.m. at the National Museum Hall, Nairobi:

Mr E.T. Monks will give an illustrated lecture on "Poisons and Poisoners".

Monday 14th May 1973, at 5.15 p.m. at the National Museum Hall, Nairobi:

Mrs Jean Brown of the Institute of African Studies of the University of Nairobi will give an illustrated lecture on "Adaptation to Environment" (the use of natural materials in the Arts and Crafts of the Peoples of Kenya).

Wedensday morning Birdwalks: meet in front of the National Museum, Nairobi every wednesday at 8.45 a.m.

- - - - - - - - - - - - - - -

NEW MEMBERS - MARCH 1973

Full members:

Mrs J.W. Ash, Box 30282, Addis Ababa, Ethiopia.
Miss H.I. Barker, Box 30465, Nairobi.
Mr Dallas L. Browne, Institute of African Studies, Box 30197, Nairobi.
Dr A.B. Carles, Box 29053, Nairobi.
Mr H.F. Cox, Box 14103, Nairobi.
Dr Stephen Emlen, Cornell Universiity, Ithaca, New York, U.S.A.
Mr Dale K. Fisher, Cheptenye Secondary School, Box 83, Kericho.
Mr J.G. Francis, 43, Archway Street, Barnes, London, S.W.
Mrs Eddah Gachukia, Dept. of Literature, University of Nairobi, Box 30197.
Dr B. Harbott, Lake Rudolf Fisheries Research Project, Private Bag, Kitale.
Dr Juliet Hayden Box 30129, Nairobi.
Mrs Lorna Hindmarch, Box 81, Njoro.
Mr P. Kinnear, 2, Mounthooly St., Lerwick, Shetland, U.K.
Mr C.P. Luxmoore, Box 40031, Nairobi.
Mr Alan Magary, Box 14023, Nairobi.
Mr B.S. Meadows, Box 30521, Nairobi.
Mr P.L. Miller, Box 30772, Nairobi.
Mrs W.S. Morrison, Tigh-na-Creag, Pitagowan, by Blair Athol, Perthshire.
Mrs Jane Nandwa, Dept of Literature, Box 30197, Nairobi.
Mr P.J. Oliver, 53, Ember Farm Way, East Molesey, Surrey.
Mrs A. Osanya-Nyyneque, Box 44111, Nairobi.
Mr P.D. Paterson, Box 24909, Karen, Nairobi.
Mrs M.C. Roggen, Box 45335, Nairobi.
Mrs A. Sauberli, Box 14259, Nairobi.
Dr Julian Shepherd, Box 30772, Nairobi.
Mr A.J. Simpkin, Box 1, Limuru.
Mr D.S. Thomson, Box 40426, Nairobi.
Mr C.E. Wheeler, 3, Woodhurst Close, Cuxton, Rochester, Kent.
Prof. Allan Wilson, Dept of Zoology, University of Nairobi, Box 30197.

Junior member:

Carolyn Bell, Box 4071o, Nairobi.

- - - - - - - - - - - - - - -

ACCOMODATION

Members who have not heard of it, might like to know of the Mwasungia Scenery Guest House in the beautiful Taita Hills about one km from Wundanyi. (40km from Voi on the tarmac road). Only food need be taken as sheets, blankets, towels, lamps and hot showers are provided. There is a very fully equiped kitchen with 'fridge and gas cooker, and a living room well stocked with books. I can highly recommend it. Phone Mr Mwachala Nbi.50643 (Box 6519, Nairobi) or phone the guest house direct. ALSO I have a very beautiful large 18th century house in Lamu, furnished with traditional furniture, which I let *in aid of the Lamu Museum.* There are t o double and five single beds as well as a large makuti covered roof where guests can sleep. Guests need only take bed linen & towels, resident servant. Cost Sh50/- per day. Contact me by post at the Museum or phone Miss Sedgewick, Nbi.53353.

Jean Brown,
Box 40658, Nairobi.

QH
7
E135
SI

EANHS

BULLETIN

Editor: Box 29003, Kabete, Nairobi, Kenya

EANHS Secretary: Box 44486, Nairobi, Kenya

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G.C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

E.A.N.H.S. BULLETIN APRIL 1973

CONTENTS

Migrating Butterflies: Effect of cloud shadow on movement - - - - - - 48

More unusual Larids in Tanzania - - - - - - - - - - - - - - - - - - - 50

Index - Notice - 51

Nest of Red-wing Starling - 52

Honeyguide Host - 53

Parasitic birds of Kenton College, Nairobi - - - - - - - - - - - - - 53

Rhino - Elephant association - 54

Reviews - 55

Letters to the Editor - 57

A.G.M. - 58

Society Announcements - 58

Society Functions - 59

Request for Information - 59

Library Notice - 60

New Members - 60

MIGRATING *CATOPSILLA FLORELLA* FABRICIUS (PAPILLIONOIDEA : PIERIDAE) BUTTERFLIES : EFFECT OF CLOUD SHADOW ON MOVEMENT AND THE SEX RATIO

The influence of shade, as an intermittant cloud-shadow, on an otherwise bright sunlit day can have a profound effect on the flying activities of butterflies. This is probably more marked in certain Pierines than in other families.

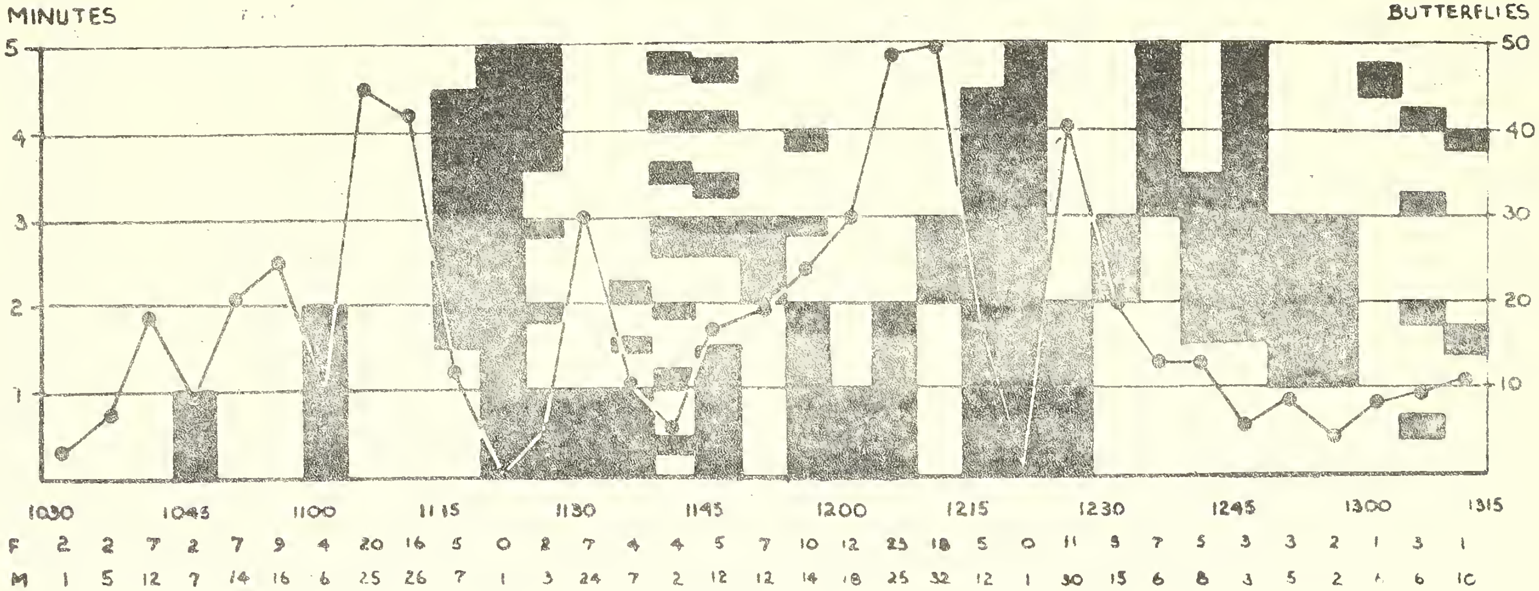
Catopsilla florella is a species prone to considerable migration movements in East Africa and a migration of this species, all flying more or less east to west, has been observed at Karen, near Nairobi, Kenya. In order to study the sex-ratio and the effect of cloud shadow, time was taken on the morning of 16th December 1972 to make counts and observations.

All specimens moving between four points, in a garden environment over an area of some 50 by 50m, were counted and recorded in consecutive intervals of five minutes duration and at the same time notes were made of the periods of cloud shadow and full bright sunlight, to the nearest half minute.

The females are clear yellow and the males green-tinged white, thus they can be clearly differentiated in the field. The first butterflies were noted just prior to 10.30h, when the study was commenced. It was anticipated that as the temperature rose, a controlling factor in flight activity, that there would be a sharp and steep build-up of numbers on the wing. Temperature in the shade at the time was around 21 C. This was the case for the first fifteen minutes then the cloud shadow put down all the insects to rest on foliage or on the ground; cloud was only present for one minute but this was sufficient to cause the cessation of flight. However, in the next ten minute period, there was a rise in numbers passing in full bright conditions. Two minutes of cloud shadow at the start of the seventh five-minute period, at 11.00h, halted movement but thereafter numbers rose steeply to 45 and 42 in the next ten minutes of uninterrupted sunshine.

From the histogram the effect of the prolonged shadow or "blinking" periods, intermittant cloud-sun-cloud of short intervals, can be readily seen in the period between 11.20 and 11.25h when only a single butterfly passed. A bright period between 11.30 and 11.35h saw the numbers increasing, from 5 to 31. Blinking periods intervened, erratic short spells of full and obscured sun for ten minutes, from periods fourteen to sixteen, when there was little movement. With more and longer periods of sunlight, numbers increased sharply, from 6 - 17 - 19 - 24 - 30 - 48 to 50, to period twenty-one at 12.15h, thereafter intermittant bright and obscured sun periods were frequent and caused very erratic flight numbers until 13.00h, when a prolonged period of blinking cloud shadow occurred with little movement until 13.15h with only a few insects on the wing. Observations ceased at 13.15h as the sky clouded over with dark rain clouds and all butterfly movement ceased completely.

It was noted that resumption of flight took between thirty seconds to a full minute before the butterflies left their resting positions and resumed flight. Females appeared to be the first to get under way, as in periods 1, Histogram showing Cloud shadow periods and numbers of Butterflies



Black represents cloud shadow

15, 26, and 31 when greater numbers were counted, and they appeared to delay resting, more so than the males, under cloud shadow conditions.

Over the two hours forty five minutes of observations, 585 *C. florella* passed, moving steadily from east to west, flying a metre or so above ground level or rising to 10 - 15m and coming in over or between trees, then crossing a large area of lawn and finally ascending to pass over more trees. Often several males and females appeared together, closely following each other. Of the total, 212 were female and 373 male, or 35.0 and 65.0% respectively, a ratio of about 1:2. Numbers of each sex passing in each five minute period is shown in the histogram.

The migration followed a period of good rainfall in October, following a very long dry spell. This rainfall probably provided sufficient larval food, mostly leguminous species, to build up the population and thus the migration was induced with the onset of the hotter drier weather.

Many other species were on the wing at this time, *Precis hierta* Fabricius and *P. oenone* Linn. both migratory were also moving east - west, while other pierines, *Belenoise zochila* Boisduval, *Nepheronia thalassina* Boisduval and *Eureme hecabe* Linn. were more content to visit garden flowers; but nevertheless, all rested as soon as the flower beds were in shadow. Various *Papillio* spp. were also present with *Danius chryssipus* Linn. and *Hypolimnas misippus* Linn. and similarly rested in cloud shadow.

At the time of writing (30th January 1973) the migration continues but it has changed direction and all are streaming north-east. There is a strong movement at Lake Naivasha but no insects are crossing the water.

G.R. Cunningham van - Someren,
Box 24947, Karen.

MORE UNUSUAL LARIDS IN TANZANIA

CASPIAN TERN *Sterna caspia*

A fine adult in winter plumage was watched at close range resting on a sandbank at the edge of the main channel of Mzimbazi Creek estuary on 17th December 1972. The bird was seen well by myself and Robert Stjernstedt and we were able to compare it with nearby specimens of Lesser Crested and Swift Terns, *S. bengalensis* and *S. bergii*. Either the same or other individuals were seen near Dar es Salaam on 18th and 24th December. This is my first record for the area in more than two years residence. Two more Caspian Terns were seen fishing off Bagamoyo (60km north of Dar) on 5th March.

WHISKERED TERN *Sterna hybrida*

At least twelve adults in full breeding plumage were watched flying over a small swamp on the edge of a seasonal 'mbuga' near Kondoa in Dodoma Region on 11th January 1973. They were calling and swooping down to regular sites in the swamp giving every appearance of feeding young. Unfortunately it was impossible for me to investigate further.

LITTLE TERN *Stern albifrons*

On 25th February 1973, two Little Terns were watched fishing in shallow water off Mbudya Island about 3km north east of Kunduchi near Dar es Salaam. They were watched at close quarters for over fifteen minutes. This is my second sighting of the species in the area, the first being a single bird fishing off the mainland at Msasani near Dar es Salaam in December 1970.

LESSER BLACK-BACKED GULL *Larus fuscus* and HERRING GULL *Larus argentatus*

The Lesser Black-backed Gull is a common winter visitor and passage migrant in the Dar es Salaam area. Flocks of up to 200 are regularly seen from November to March and smaller numbers occur throughout the year. Most birds are almost black backed (corresponding to the Scandinavian and Russian race *fuscus*) and indeed a bird was found in early December 1972 bearing a Finnish ring. However from November to March small numbers (up to 10 at a time) of birds with paler, slatey grey backs have been recorded. These birds have yellow feet and toes and look very like the estern European race *graellsii*. Graeme Backhurst (*in litt.*) has pointed out that it is extremely unlikely that this race would occur on the east coast of Africa. I think, therfore, that it is possible that these birds belong to a dark backed race of the Herring Gull and the North West Russia race *heuglini* would seem to be the most likely.

BLACK-HEADED GULL *Larus ridibundus*

The firm identification of the large flock of small gulls recorded in the Dar es Salaam area in early 1972 (*E.A.N.H.S. Bull.* 1972:41 & 67-68) must await the collection of a specimen. At least six individuals oversummered in 1972 and by February 1973 the flock had built up to 250, again in the same area. I have also recorded similar individuals at Kondoa Mbuga (3 on 11th January 1973) Momella lakes, Arusha National Park (3 on 4th February 1973) and Ngorongoro Crater (6+ on 10 February 1973). Whether these birds will turn out to be *L. ridibundus* or *L. genei* (or indeed both species) it is obvious that at least one palaearctic species of small gull has become a regular, and indeed common, visitor to Tanzania.

Incidently, I would welcome any advice from experienced observers on the identification of White-cheeked Terns *Sterna repressa* in non-breeding dress.

I would also warn members that access to the Selander Bridge area in Dar es Salaam (a favourite bird haunt) is now restricted for security reasons and there are several large notices there to this effect.

W.G. Harvey,
Box 9100,
Dar es Salaam,
Tanzania.

- - - - - - - - - - - - - - - - - -

1972 INDEX

Included with this issue is the 1972 Index. It was received from Dr Ebbels in early January but it has only just become possible to reproduce it. We are most grateful to David Ebbels for his painstaking compilation.

Ed.

MORE BROAD - BILLED SANDPIPERS AT LAKE RUDOLF

After observing a single Broad-billed Sandpiper *Limicola falcinellus* at Ferguson's Gulf, Lake Rudolf, on 2nd September 1972 (*E.A.N.H.S. Bull.* 1972: 170-171) we were delighted to see a further nine beside the landing place at Ferguson's Gulf on 1st October. During the following three weeks the same group (up to 10 were seen sometimes) stayed in the locality feeding in the shallow pools. As they were tame and took little notice of human activity we were able to observe and photograph them, at often less than 5m, from the jetty.

Tony and Jane Hopson,
Lake Rudolf Fisheries Research Project,
Ferguson's Gulf,
Private Mail Bag, Kitale.

A black and white photograph of one of these birds, clearly showing the head markings and heavy bill, is lodged in the Bird Room at the National Museum, Nairobi.

Ed.

- - - - - - - - - - - - - - -

NEST OF RED - WING STARLING *ONYCHOGNATHUS MORIO*

A pair of Red-wing Starlings have been nesting on a hand-made platform, attached to the wall under the eaves of the camp house 3m above ground level. It is a simple cup-shaped nest made of rootlets and dry grass lined with fine material.

These birds bred twice in 1972, producing three young in March and two in November. On both occasions the young stayed 27 days in the nest; from the day of hatching to the day of flight.

During this time, the parents were very busy searching for food starting as early as six in the morning and stopping as late as seven in the evening. Various types of insects and reptiles were used for feeding, such as honey-bees, beetles, butterflies, spiders, caterpillars, lizards and when the young were two weeks old, fruit of fig trees were used as well. The parents fed the young with freshly taken food rather than regurgitating it.

On the day that the young left the nest, I observed six other starlings come along to encourage them during their first day in the air. On the first occasion, when the young had been out of the nest for more than a month, I saw them come back to the nest again to be fed by their parents. This was on 17th May 1972, it was a cold and cloudy day and the performance did not last for very long.

On each occasion, after the young had finally left their nest, the parents went on roosting in the nest until ready to lay eggs again.

Sifael A. Mungure,
Arusha N. Park, (Kusare Research Camp),
Box 3134, Arusha, Tanzania.

- - - - - - - - - - - - - - -

HONEYGUIDE HOST

On a Wednesday morning bird walk in the Arboretum on 31st January 1973, we saw a pair of Kikuyu White-eyes *Zosterops senegalensis kikuyuensis* feeding a young Cassin's Honeyguide *Prodotiscus insignis*.

The following week, I saw another pair of White-eyes feeding another young honeyguide in a garden in Karen.

Mr Forbes-Watson points out that in *Ostrich*, Supplement No.8, 1969: 24-25. Friedmann suggests that *Prodotiscus insignis* are in fact two species, *P. insignis* and its two races (*flavodorsalis* and *insignis*), with greenish-olive upperparts and duskv underparts, found in West Africa to parts of northern and western Uganda and western Kenya, and *P. zambesiae*, with more greyish-olive (less greenish) upperparts and paler, whitish to greyish underparts. Friedmann adds: "A complete revisionary study is still needed of this group, but it will require much more material than is yet available".

Fleur Ng'weno,
Box 42271, Nairobi.

PARASITIC BIRDS OF KENTON COLLEGE, NAIROBI

At Kenton College we have a thriving and enthusiastic Bird-watching Club. Some time ago I had noticed White-headed Barbets *Lybius leucocephalus* about, and more recently some of the boys here brought to my attention the nest of the barbets. This caused excitement which was increased when it was found on23rd January 1973, that the two adult barbets were continuously carrying food into the nest and excreta out of it. The cheeping calls of the young inside the nest could be heard. The nest itself is only about 3m above the ground and easily accessible which caused me anxiety about the safety of the young. However the nest was carefully watched, over a period of about four weeks, during which time the young came out of the nest and were taught to feed by the adults. The flying lessons were not observed. The adults were seen to feed the young with insects which they caught, and when they could not catch these, they brought figs from a nearby tree. My interest in these birds caused me to enquire about them at the National Museum, where I learnt that Honey-guides *Indicator* spp. are sometimes parasitic on these barbets. This made me look out for honey-guides, and sure enough a few days later, on 20th February 1973, I noticed one of the adult barbets chasing off a bird with much raucous squawking. The bird proved to be a Lesser Honey-guide *Indicator minor*. As the days passed the honey-guide grew more and more persistant in approaching the barbet's nest until one day it was seen at the nest mouth. It was soon chased away again by the barbets and since that day the honeyguide has not been seen again. The nest could not be watched continuously, so it is possible that the rearing of a young honey-guide went unnoticed, or alternatively no egg was ever laid. From what I can see of the nest at the moment there are no young or eggs in it, although the barbets still use the nest frequently.

Turning from honey-guides to Cuckoos, more well known amongst bird parasites. On leaving the house on the afternoon of 2nd March 1973 I heard the plaintive and incessant cheeping of a young bird which turned out to be a fledged Emerald Cuckoo *Chrysococcyx cupreus*. Intrigued to see what was feeding this bird, I waited and watched, and to my surprise up flew a female Bronze Sunbird *Nectarinia kilimensis*. The young cuckoo cheeped more frantically, fluttered its wings in a helpless manner and the sunbird proceeded to feed it, stretching up to reach the mouth of the much larger cuckoo. This was repeated at regular intervals for two days. At times the cuckoo would suddenly lose its helplessness and fly after the sunbird. On several such occasions the cuckoo was chased by Fiscal Shrikes *Lanius collaris* and Reichenow's Weavers *Ploceus baglafecht*. The question is: "Did the sunbird rear the cuckoo from the egg?" If so, how did the adult cuckoo lay its egg in the sunbird's tiny nest, and how did the sunbird cope with such a large fledgling in her nest? If not, who did rear the cuckoo and why did the sunbird take over the upbringing?

S.J. Stagg,
Kenton College,
Box 30017, Nairobi.

RHINO - ELEPHANT ASSOCIATION

On 11th February 1973, in the evening whilst sitting at Madana Rock in Tsavo National Park (East), we observed a rather unusual sight. From a long distance away we saw a small rhino leading an elephant right through the bush to the water at Madana. It was very apparent that the two animals were together. At the water-hole there was already another rhino, the small rhino did look at the bigger rhino as it passed but did not stop, but carried on leading the elephant to the water. Both animals got into the water and drank. Having had its fill, the elephant began to move off, but as the small rhino remained in the water, sometimes turning to look at the other rhino, the elephant waited on the bank. As his little rhino 'friend' still remained in the water with no sign of coming up the bank, the elephant returned to the water and stood beside the rhino, obviously waiting for it until it was ready to leave too.

It would be interesting to hear if any other reader has seen a similar 'friendship' between these animals, or whether it is unusual. I understand that once rhino move into an area the elephant tend to move out.

Mavis M. Heath,
Box 271,
Malindi,
Kenya.

GUIDE TO THE RUWENZORI by H.A. Osmaston and D. Pasteur.
x + 200pp., colour frontispiece, 16 black and white plates, 15 text figures, 10 text maps. Mountain Club of Uganda (P.O. Box 2927, Kampala) 1972, sh.40/-. Also obtainable from West Col Productions, 1 Meadow Close, Goring-on-Thames, Reading, Berks, U.K.

When I first visited the Ruwenzori in 1968 all I had for guidance was a map and a battered sheaf of duplicated notes produced by the Mountain Club of Uganda. The notes had passed from party to party within the Kenya Mountain Club and also through many a Ruwenzori bog so it was just as well that the map was good. It was fun feeling like explorers in this incredible and fascinating area, but on the other hand, like most parties we had limited time and money and a full guidebook would have made a great difference to the trip.

Thus this first edition of a GUIDE TO THE RUWENZORI is a very welcome addition to the literature on East African mountains. In the tradition of that literature the guide caters for far wider interests than that of the pure climber. Of the 200 pages just 82 are devoted to the climbing routes, and these are explained very clearly with the liberal use of maps, drawings and photographs. The remainder of the guide falls into chapters as follows.
1) General information - access, epuipment, porters, huts etc.
2) Walking routes - a total of 30 described
4) Natural History - everything from glaciology to insects.
5) History - starting from 500 BC and then almost year by year for the last hundred, plus a section on place names.
6) Bibliography - with 368 classified references.
There is even a Kiswahili vocabulary. Considering that the small print used gives up to 500 words per page one can see there is good value for the high purchase price.

There can be little doubt as to the accuracy of the essential information - the guide has evolved from a long series of well used duplicated notes. The peripheral information is presented in such a clear and scholarly manner that it is obviously the work of authors used to presenting this sort of information for professional purposes. As a source book it is excellent: for instance in the Bibliography I counted 81 references classified under Botany and Zoology.

The guide is produced as a true pocket book, 11 X 17cm on waterproof insectproof paper, but it is a pity that the covers are of board rather than the conventional and well tried plastic covers used on other mountain guides. An index would have been useful, but would have increased the cost even further and it must be remembered that the guide has been produced by a small amateur club. It is hoped that this guide will encourage more naturnaturalists and geographers to supplement the numbers of climbers visiting the Ruwenzori - there is tremendous interest and scope for study in this area. It is also hoped that access to the Ruwenzori will not be restricted to the local poachers for too long.

A.R.W.

THE CICHLID FISHES OF THE GREAT LAKES OF AFRICA Their Biology and Evolution by by G. Fryer & T.D. Iles. 641pp., 350 text-figures, 10 black and white photographs and colour plates. 1972, Edinburgh: Oliver & Boyd. U.K. price £12.00.

This is an outstanding book, both in scientific content and in its superbly written, readable style. The Authors have not assumed us to be expert ichthyologists; it is indeed refreshing to be able to *read* (so as to clearly understand) a work of this scope and magnitude.

The cichlids, which include the genus *Tilapia*, are a family of that vast order, the Perciformes, or perch-like fishes. They are of great significance as a source of protein food, being one of the most important resources of the region. They also rate as one of the most exciting subjects in the study of evolution. From the time when their progenitors first colonised the Lakes, they have proceeded to occupy every ecological habitat in an explosion of adaptive radiation and speciation. There are phyto- and zooplankton feeders; deposit feeders; epilithic (rock surface) algal feeders; epiphyton (algal growth on water plant) feeders; leaf-choppers; mollusc, insect and other arthropod feeders; piscivores; highly specialised species which feed on fish eggs, embryos or larvae; there are scale eaters, fin-biters, and bizarre and grisly eye-biters.

It is quite impossible to precis a book of this depth in a brief review, and there is no course but to severely restrict oneself to some highlights.

There are absorbing accounts of highly complex behavioural patterns, especially in relation to territory, courtship and breeding. A feature of the cichlids is parental care: females of many species collect and brood their eggs and young in their mouths. There are chapters on means of communication (the cichlids have a highly developed system of visual signals), and on other specialised habits such as shoaling and physical tolerance (the Lake Magadi *Tilapia grahami* lives in saline lagoons fed by 37 - 45C hot springs.) Colour and colour patterns, species interrelationships, community structure, genetic polymorphism (species with two or more colour forms), growth phenomena, and cichlids as a natural resource are dealt with masterfully, but always with simplicity: the amount of accumulated knowledge on this group is astonishing.

A splendid chapter on the history of the African Lakes is a prelude to the climax on adaptive radiation and speciation.

I wonder how many naturalists in East Africa are aware that Lakes Malawi, Victoria and Tanganyika *each* contain more species of fishes than any other lake in the world. For those who are interested in numbers, there are 242, 208 and 193 species of fish in Malawi, Victoria and Tanganyika respectively; what is more remarkable, more than 200, 170 and 126 respectively are cichlids. They show a very high degree of endemism: in Malawi, all but 4 of the 200 are endemic (i.e. they occur nowhere else); in Victoria all but 6; in Tanganyika all 126 are endemic. Nor does it stop there. Lake Albert has 10 species of cichlids (4 endemic); Rudolf 5 (2); Edward/George 28(19); Kivu 9 (8); Rukwa 2 (1); Bangweulu 9 (1); Mweru 12 (4); Chilwa 5 (0) and Nabugabo 10 (5). A staggering total of 540 endemic species.

Seen in this light, the achievements of those foremost examples of adaptive radiation, Darwin's Finches of the Galapagos (with 14 endemic species) pale into insignificance.

I did not know about any of this until I read the book. I can recommend it as a classic thesis on natural history and evolution. Even if you are not interested in fishes.

K.R.B.

- - - - - - - - - - - - - -

LETTERS TO THE EDITOR

Sir,

THE C. J. P. IONIDES MEMORIAL FUND

C.J.P. Ionides the well known herpetologist and naturalist, died in Kenya in 1968. He had collected reptiles in East Africa for nearly thirty years and had contributed greatly to East African herpetology. In addition he had played a very significant role in the development of the National (formerly the Coryndon) Museum, Nairobi and personally collected many of its rarer mammals.

There is no memorial to Ionides in East Africa and we feel that some tribute to his work is long overdue. A fund has therefore been started named "The C.J.P. Ionides Memorial Fund" in order to purchase and erect an exhibition cage and commemorative plaque to him in the Nairobi Snake Park. Ionides collected large numbers of reptiles for the Nairobi Snake Park and did much to establish its world-wide reputation. It would seem fitting therefore that a tribute to his work in the form of a plaque and special exhibit should be displayed within the Snake Park. If donations exceed the figure required for such a cage and plaque, the excess will be used for an extension to the Snake Park buildings.

We welcome the opportunity, through the *Bulletin*, of drawing the attention of all members to this appeal. A large number of people met Ionides and worked with him, many others will have read of him. We invite subscriptions to this appeal which should be made payable to: "The C.J.P. Ionides Memorial Fund" and sent to The Standard Bank Ltd., Box 14438, Nairobi. All donations will be acknowledged and details of the memorial project will be published in due course.

J.H.E. Leakey, Lake Baringo, Box 1141, Nakuru, Kenya.

J.E. Cooper, c/o Veterinary Services Division, P.O. Kabete, Kenya.

C.R.S. Pitman, Leicester Court Hotel, 41 Queen's Gate Gardens, London.

A. Duff-Mackay, The National Museum, Box 40658, Nairobi, Kenya.

Marianne Mitton, 16 Bailleul Road, Delville, Germiston, South Africa.

Sir,

With reference to Miss Rickman's letter in the March *Bulletin* regarding the roaring giraffe: some years ago, when I was capturing giraffe near Kitale, we found that giraffe calves when first caught would open their mouths and roar as lustily as any domesticated cow's calf, and when tamed they would sometimes 'moo' very softly, though without opening their mouths.

However after a few months they seemed to lose the ability to do this. We certainly never heard an adult roar, though two males fighting (which they did by swinging their heads at each other) sometimes made a noise something between a grunt and a growl. This sound however would seem to come from deep inside their bodies and to have nothing to do with vocal cords.

Hugh R. Stanton,
Bushwhackers Safari Camp,
P.O. Kibwezi,
Kenya.

- - - - - - - - - - - - - - -

A. G. M. 1973

The Annual General Meeting of the Society was held on 12th March 1973 in the National Museum Hall, Nairobi. Mr Karmali reported on the year's achievements which gave cause for encouragement: the *Journal* contained twice as many pages in 1972 as in 1971 and the finances (reported by Mr Clifton) were in a healthy state.

The new Excutive Committee members were elected *nem. con.*; their names will be printed inside the cover of next month's *Bulletin*.

After the official business was concluded, members were shown three excellent bird films very kindly lent by the British Council.

Ed.

- - - - - - - - - - - - - - -

SOCIETY ANNOUNCEMENT

The *East African Standard* of 9th March 1973 carried the following news item on its front page:

> "Drop title of president
>
> The following statement was issued yesterday by the Kenya Government:
>
> "The existence of the title of "president" amongst the posts of officers of societies, trade unions, companies and other associations can cause confusion with the title of His Excellency the President of the Republic of Kenya.

> "in the circumstances, the Government of Kenya requires that the constitutions of such associations be changed to make fresh provision for the title of such posts."
>
> *K.N.A.*"

At the Annual General Meeting of the East Africa Natural History Society on 12th March 1973, Mr John Karmali (the Society's President) obtained a mandate from the members present for the Executive Committee to discuss the matter and to choose new titles to replace those of 'President' and 'Vice President'. On 21st March 1973, the Executive Committee selected the title 'Chairman' for Mr Karmali, and 'Vice Chairman' for Mrs Campbell.

Ed.

- - - - - - - - - - - - - - -

SOCIETY FUNCTIONS

Monday 9th April 1973, at 5.15 p.m.: at the National Museum Hall, Nairobi. Mr E.T. Monks will give an illustrated lecture on "Poisons and Poisoners".

Sunday 15th April 1973: Mr A. Duff-Mackay will lead an excursion for the study and identification of small mammals. Live traps will be set out on the previous day in a locality near Nairobi, depending on road and weather conditions. Please meet at the National Museum, Nairobi at 9 a.m. sharp and bring a picnic lunch

Saturday 28th April 1973: Mr M.P. Clifton will lead a "dudu crawl", please meet at the National Museum at 2.15 p.m. and bring a picnic tea.

Monday 14th May 1973, at 5.15 p.m.: At the National Museum Hall, Nairobi. Mrs Jean Brown of the Institute of African Studies of the University of Nairobi, will give a lecture on "Adaptations to Environment" (the use of natural materials in the Arts and Crafts of the Peoples of Kenya).

Saturday 16th June 1973: Society visit to Mountain Lodge on Mt. Kenya. Price shs.90/- per person. No children under 12 years old. Please send bookings to the Secretary, Box 44486, Nairobi, including payment as soon as possible.

- - - - - - - - - - - - - - -

REQUEST FOR INFORMATION

I would like to thank those members who so kindly provided information regarding nesting colonies of the Pied Kingfisher and the White-throated Bee-eater. Thank you all.

G.R. Cunningham - van Someren,
Box 24947, Karen

- - - - - - - - - - - - - - -

LIBRARY NOTICE

NEW BOOKS: The following books have been purchased by the Society for the Library:

Ardrey - The Social Contract. Collins, 1970.

FitzSimons - A field guide to the Snakes of Southern Africa. Collins, 1970

Van Lawick Goodall - In the Shadow of man. Collins, 1971.

Guggisberg - Crocodiles. David & Charles, 1972.

Harrap's new shorter French & English Dictionary. 2nd ed. repr. 1967.

Horrobin - Guide to Kenya and Northern Tanzania. E.A. Publishing House 1971.

Kingdon - East African mammals: an atlas of evolution in Africa. Academic Press, 1971.

Lind & Tallantire - Some common flowering plants of Uganda. Country Life, 1937.

Moorehead - The Blue Nile. Hamish Hamilton, repr. 1970.

Moreau - The Palaearctic-African bird migration systems. Academic Press, 1972.

The Shorter Oxford English Dictionary. 3rd ed. repr. 1970.

- - - - - - - - - - - - - - - -

NEW MEMBERS - APRIL 1973

Full members:

Mr D. Bristow, Box 48933, Nairobi.
Mrs B. Glover, Box 134, Malindi, Kenya.
Mr Jorn V. Jensen, Holtevej 13, DK - 8000 Aarhus C, Denmark.
Mr J.G. Johnston, Box 48362, Nairobi.
Drs J.H. Lourens, c/o Veterinary Research Laboratory, Kabete.
Miss C. Porter, Box 48933, Nairobi.
Mr R. Stjernsted, Box RW 60, Lusaka, Zambia.

- - - - - - - - - - - - - - - -

Bob O'Hara, a young birder from the U.S.A. would like to correspond with someone of similar interests (age 13 - 14 years) from East Africa.
His address is: Robert J. O'Hara,
20 Hammondswood Road,
Newton, Mass. 02167 U.S.A.

- - - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings.

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

E.A.N.H.S. BULLETIN MAY 1973

CONTENTS

Some recent records of Palaearctic migrants from eastern Uganda - - - 62

How to identify Butterflies to their families - - - - - - - - - - - - - 67

Where are the Emerald Spotted Wood Doves - - - - - - - - - - - - - - - 68

Nesting problem of Mosque Swallow - - - - - - - - - - - - - - - - - - - 69

Do you know that:- Part IV - 69

Letters to the Editor - 71

More unusual Larids in Tanzania - an omission - - - - - - - - - - - - 74

Society Functions - 75

New Members - 75

Some recent periodic literature available in the Library - - - - - - - 76

SOME RECENT RECORDS OF PALAEARCTIC MIGRANTS FROM EASTERN UGANDA

Eastern Uganda features relatively little in the literature on Palaearctic bird migration. Jackson's (1938) Uganda records are mainly from the south and west of the country, and with a few exceptions (see e.g. Mann 1971) observers active in recent years have concentrated attention on the same areas. One of us (JGR) was resident during 1970-71 at Kachenga'a, 16km south of Mbale, and then spent the following year based at Tegeres, at 2000m in the Chebonnet valley on the northern slopes of Mt. Elgon. This provided us with an opportunity to observe migrants in these areas, and also further afield in Bukedi, Teso and southern Karamoja. In addition, we spent two weeks during late December 1971 attempting to establish the wintering abundance of migrant passerines in northern Karamoja. During the two seasons in question some interesting species came to light, some in previously unsuspected numbers, others apparently new to Uganda. The most interesting records are summarised and discussed below.

Hieraetus pennatus Booted Eagle

This species appears to winter in the forested areas about the base of Mt. Elgon where we saw it on a number of occasions during 1971/72. The first two birds were recorded at Tegeres on 16th October in a southward movement of diurnal migrants which included 700 + Black Kites *Milvus migrans*, about 100 Steppe Buzzards *Buteo buteo vulpinus*, 60 + Bee-eaters *Merops apiaster* and thousands of black Swifts *Apus* sp. Both eagles were pale phase birds, one with rather less white on the wing linings than the other. From December onwards Booted Eagles were liable to be seen in the Tegeres/Sipi area whenever they were seriously looked for. Most were pale birds; dark phase individuals were occasionally seen, however, and others may have been missed owing to their close resemblance to other birds of prey such as *Aquila wahlbergi*. The last record was of three birds attracted to a grass fire at Sipi on 3rd April.

The species migrates as far south as South Africa, but there appears to be surprisingly few records from its winter quarters. For Uganda, Jackson mentions only a single February record from Mityana. Mann (*in litt.*) saw one at Tororo in November 1964 and there is a recent sighting from the Queen Elizabeth National Park (M.P.L. Fogden *in litt.*). Backhurst, Britton & Mann (1973) list only ten records for the whole of Kenya and Tanzania, to which we can add birds seen by DJP at Kariobangi, Nairobi, 19th February 1972 and near Ngulia, Tsavo West, 2nd December 1972, both pale phase. The frequency of sightings from northern Elgon - and there seems no reason to suppose that the winter of 1971/72 was exceptional - thus suggests this to be a wintering area of some significance.

Circaetus gallicus Short-toed Eagle

A bird first seen circling with vultures only about 50m overhead at Apoka, in the Kidepo Valley, northern Karamoja, on 24th December 1971, was identified as this species. Apart from darker smudges on the *sides* of the breast, the underparts appeared completely white, with no dark flecking that we could see. The wings and tail were also white below, the former with a darker trailing edge and a few faint parallel bars, and the latter with a broad darker terminal band, and three other narrower bands. The field separation of many Short-toed Eagles from the intra African migrant Beaudouin's Harrier Eagle *C. beaudouni* would seem to be rather problematical. Since, however, the Kidepo bird was particularly white below, we feel justified in presuming it to have been of the Palaearctic species. Comment from observers at all familiar with the field characters of *C. beaudouni* would be very welcome.

The Short-toed Eagle occurs throughout Ethiopia from October to March (Urban & Brown 1971), but Backhurst *et al.* (1973) give only one record from northern Kenya. White (1965) states that it has occurred on Mount Elgon (which country?), but the above would seem to be the first definite record for Uganda.

Buteo rufinus Long-legged Buzzard

The Long-legged Buzzard reaches the Sudan (White 1965) and Ethiopia (Urban & Brown 1971) in small numbers, and there are two acceptable records for Kenya (Backhurst *et al.* 1973). A number of pale buzzards were observed by JGR during the autumn of 1971 in flocks migrating south across Elgon, but these were identical in size, shape and flight with typical Steppe Buzzards with dark underparts and were assumed to have been *B. buteo.* In view of the fact that Steppe Buzzards often have rufous tinged tails with the barring indistinct, Long-legged Buzzards are by no means easy to distinguish in East Africa. The following record, however, we consider refers to *B. rufinus*. A bulky-looking buzzard perched on a small tree on the edge of the Debasien Game Reserve near Mt. Kadam on 29th December 1971 had the entire head and neck pale yellowish brown, contrasting with the brown upperparts and rufous lower breast and belly. The tail, seen well in flight, was unbarred ashy cinnamon, almost white at the base. The bird seemed lethargic in habits, being content to fly a short distance to the next tree when disturbed, and appeared very heavy on the wing.

Larus ridibundus Black-headed Gull

Two second year birds were seen at Lake Bisina on a number of occasions on 31st December 1971 and 1st January 1972. There seems to be only one reliable previous record for Uganda, a bird in full breeding plumage near Kampala on 28th March 1971 (R. Frankum *in litt.*); the species also appears on the Queen Elizabeth Park Check List, but we have been unable to trace details of this occurrence. Black-headed Gulls appeared in unprecedented numbers in Kenya and Tanzania in 1971/72.

Sterna hybrida Whiskered Tern

A bird in non-breeding plumage was observed at Lake Bisina on 6th November 1971. Larger than nearby White-winged Black terns *S. leucoptera*, it had a conspicuously longer bill and a slower more bouyant wingbeat. The black on the head was practically confined to the nape and ear coverts; there were no markings on the sides of the breast. This bird seems likely to have been of the Palaearctic race, *S. h. hybrida*. Mann (1971b) recorded this species from the same area during the autumn of 1966; the only other Uganda records of which we are aware have come in recent years from the Queen Elizabeth National Park (M.P.L. Fogden *in litt.*).

Jynx torquilla Wryneck

One was trapped and ringed at Kachonga'a on 3rd March 1971, then retrapped three days later. (Another Wryneck, briefly seen on 9th December 1970 in the Debasien Game Reserve, was thought to have been of the Palaearctic species.) Jackson gives a single record of this species for Uganda, but Mann (*in litt.*) observed 1-2 at Soroti throughout February and March 1967. A.P. Zeigler (pers. comm.) saw the species once during a season at Kidepo.

The Wryneck barely reaches East Africa. In addition to the birds mentioned above, there are just two records from Kenya (Britton & Harper 1969, DJP unpublished).

Delichon urbica House Martin

Found wintering in fairly large numbers during the winter of 1971/72 round the northern slopes of Mt. Elgon, where it was observed from early October to April. The species was rarely seen below 1700m, the main flocks apparently frequenting cliff faces above forest at 2300 - 3000m. Parties were regularly seen feeding at dusk at Tegeres, before flying higher up the mountain as it became dark. In early January 2 - 3000 birds were estimated in the valleys of the Cheptui and Chebonnet alone; further flocks were present in most of the valleys between here and Endebess (Kenya) so that the figure of 50000 birds wintering on northern Elgon would seem not an unreasonable estimate.

Further north, during the morning of 27th December 1971, we encountered several small parties feeding low at 1000m in the Kidepo Valley Park, and the following day several hundred more birds between Apoka and Kaabong. These birds had presumably descended from nearby hills to feed at low altitude in still, early morning conditions; we saw none later on either day. It seems probable that in addition to Elgon, this species winters in other high altitude areas in eastern Uganda.

Oenanthe pleschanka Pied Wheatear

Jackson implies that this species occurs in Uganda only as a straggler. We found it abundant, however, in the north-east. In some scrub-covered areas of the Kidepo Valley it was the commonest wintering wheatear, and in Karamoja generally it seemed to be second only in abundance to *O. isabellina*. It appears to winter regularly in small numbers south to Mbale and Tororo. This is a species which is practically absent from south-west Uganda.

Phoenicurus phoenicurus Redstart

Apparently a regular but locally distributed wintering bird as far south as Mbale. A number were present and, as shown by ringing, resident at Kachonga'a during both seasons of observation, arriving late in the year and departing at the end of March. The species was abundant in woodland bordering the eastern shore of Lake Kyoga. In the nort-east, the Redstart is practically absent from the dry thornbush areas of northern Karamoja, but common again in the less arid Kidepo Valley, where in late December it was found in riverine vegetation and other green areas.

The abundance of the Redstart near Lakes Kyoga, Bisina and Albert (A.P. Zeigler, *in litt*) is in contrast to its virtual absence in winter at Lake Victoria (Pearson 1972a) and Lake Edward farther south.

Luscinia megarhynchos Nightingale

A locally abundant wintering species on the eastern shore of Lake Kyoga. At Lalle, 20km west of Soroti, at least one bird per acre was present in early January 1972 in an extensive area of rather dry secondary woodland bordering the lake. Almost all these birds had departed by the end of March. Elsewhere in eastern Uganda this species was found to be scarce, we have two records only from Lake Bisina.

The race *L.m. africana* occurs not uncommonly as a wintering and passage bird in parts of Kenya. Jackson regarded the Nightingale as rare in Uganda, however, and we know of very few recent records apart from the above. M.P.L. Fogden (*in litt.*) has trapped the species only rarely in the Queen Elizabeth Park and Pearson (1972) found it scarce at Kampala, where with the exception of one *L.m. hafizi* the few birds caught were of the nominate race. The Kyoga area might well represent the only important wintering area of *L.m. megarhynchos* in East Africa. The song of the Lalle birds, deeper and less "tinny" than that of wintering *africana,* and their generally russet appearance, suggested that they were of the nominate race. Unfortunately none were caught.

Hippolais languida Upcher's Warbler

A fresh plumage bird was trapped and ringed by JGR at Kachonga'a on 20th March 1971. Measurements (in mm) were: wing 76, tail 65, tarsus 23: wing formula, 3rd = 4th longest, 5th -1, 6th -5, 10 -16, 2nd -4, 1st = pc, emarginated 3rd-5th.

A second bird was trapped at Lake Bisina on 24th March 1972, still completing primary moult: wing (73), tail 60, tarsus 22. During the same spring other examples were seen in the field at Lake Bisina on 24th March (one) and 30th March (two - three), and at Kachonga'a on 29th March (one). Finally, a single bird was seen at Lake Bisina on 2nd April.

There is a report of a bird collected in the Queen Elizabeth Park in February 1964, but we have been unable to trace this specimen. Van Someren (1931) states that Upcher's Warbler reaches eastern Uganda, but the above would seem to be the first satisfactory dated records for the country. The impression given is that the species was present only on spring passage.

Sylvia nisoria Barred Warbler

We have the following records, all from the southeast:

Tororo, 20th March 1971, one seen.
Kachonga'a, 29th March 1971, one seen.
Lake Bisina, 30th March 1971, two caught, at least two others seen.
Tororo, 5th November 1971, one seen.
Lake Bisina, 28th November 1971, one caught.

The dates involved would indicate that this was a passage species. It was not recorded in winter, despite being searched for in Karamoja. Surprisingly it was absent in spring 1972 from areas where it was seen the previous year.

Although a common wintering bird of parts of northern and eastern Kenya, the Barred Warbler has been little recorded from Uganda (see Pearson 1972b).

Phylloscopus collybita Chiffchaff

Two birds were trapped and another seen on the southern edge of Lake Bisina (1000m) on 19th December 1971, the trapped bird exhibiting the characteristics of the race *abietinus*. These were presumably on passage to wintering grounds on Mt Elgon or Mt. Kadam. In the Cheptui and Chebonnet valleys of northwestern Elgon we recorded the species from 20th December to March, but song was not heard before mid January. Odd birds were occasionally seen as low as 2300m, but the species was most common, outnumbering *P. trochilus*, between 2500m and 3000m. On one occasion a bird was seen high in the heather zone at 4000m near the Kenya border.

The Chiffchaff probably winters regularly in small numbers in the highland forest in Kenya and northern Tanzania (Backhurst *et al.* 1973) but although it has occasionally been recorded on Mt. Elgon there seem to be no previous records for Uganda. It seems probable that the species would be found in other eastern Uganda highland areas. Lake Bisina is, in fact, as near to Mt. Napak (2800m) and Mt. Kadam (3300m) as to Elgon. Unlike the Blackcap *Sylvia atricapilla* the Chiffchaff does not seem to reach the Ruwenzoris (M.P.L. Fogden *in litt.*).

J.G. Rolfe & D.J. Pearson,
Box 30197, Nairobi.

REFERENCES:

Backhurst, G.C., Britton, P.L. & Mann, C.F. (1973) The less common Palaearctic migrant birds of Kenya and Tanzania. *Jl E. Afr. nat. Hist. Soc. & Nat. Mus.* No.141:1-38.

Britton, P.L. & Harper, J.F. (1969) Some new distributional records for Kenya. *Bull. Br. Orn. Club* 89:162-65.

Mann, C.F. (1971a) Distributional notes on some Uganda birds. *Bull. Br. Orn. Club* 91:111-113.

- - - - - (1971b) The occurrence of the Whiskered Tern in Uganda. *EANHS Bull.*:196.

Pearson, D.J. (1972a) The migration and wintering of Palaearctic passerines in Kampala, southern Uganda. *Ibis* 114:43-60.

- - - - - - - - (1972b) Some migrant bird records from the Kampala area, Uganda. *EANHS Bull.*:27-29.

Urban E.K. & Brown, L.H. (1971) A Checklist of the Birds of Ethiopia. Addis ababa:Haile Selassie University Press.

Van Someren, V.G.L. (1931) Catalogue of the European and Asiatic migrants to Kenya and Uganda . . . . . *Jl E. Africa Uganda nat. Hist.Soc.* Special Supplement No.4:1-40.

White, C.M.W. (1965) A Revised Checklist of African Non-Passerine birds. Lusaka:Government Printer.

- - - - - - - - - - - - - - - - -

HOW TO IDENTIFY BUTTERFLIES TO THEIR FAMILES

I have often been asked how to identify butterflies, usually from 35mm slides, down to family. Several people have suggested that I write some notes on the subject.

In East Africa there are 10 families of butterfly: Papilionidae, the Swallowtails, Pieridae, the Whites and Yellows; Danaidae, the Monarchs; Satyridae, the Browns, Nymphalidae, the Brush-footed Butterflies; Acraeidae, the Acraeas; Libytheidae, the Snouts, Riodinidae, the Judys; Lycaenidae, the Blues, Hairstreaks and Coppers and the Hesperiidae, the Skippers.

This is the first part of a series which will cover only the Papilionidae. All the African species can be placed in one genus, *Papilio*, although other genera are used occasionally they are really only sub-genera.

In the following descriptions the scientific name or term is used before the popular one to describe a particular part, and is printed in italics.

PAPILIONIDAE - THE SWALLOWTAILS

These butterflies are mostly large, usually with a wingspan of between 10 and 20cm; they may be blue, black with blue or green bands, black with yellow or green speckles, bright red with black spots, black with green streaks, pale yellow, orange, black and white, or a combination of any of the above.

To tell them in the field, look for a large butterfly which though moving in an almost straight line, wavers to one side or the other to a small degree. The speed of flight appears excessive when compared with the short wing-beat. The wings look enormous when compared with other butterflies seen flying with them. They very rarely glide in flight, but if they do the wings are held in quite a sharp "V", but only for the duration of a couple of normal wing-beats. On settling, if feeding at a flower, their wings are vibrated very rapidly all the time and the feet are moved around the flower. On a damp patch (only the males come to these) the wings are held stiffly upright over the back, similar to their attitude when resting for the night. They very rarely rest with their wings fully expanded, except in the early morning when this helps them to warm up sufficiently to fly.

Now for the insect in the hand: look at the legs to see if all six can be used for walking; they can in this family. If the butterfly has one large tail on each hindwing with a vein down the centre it is definetely a *Papilio*. Not all the Papilionidae have tails however and so we have to look at the venation. On the forewing is an enclosed area (the *cell*) which is about two-thirds the length of the forewing. The hindwing has a similar cell about half the length of the hindwing. The end of the forewing cell is nearly straight, rather like the lower half of an "H". The end of the hindwing cell is variable, normally rounded and a little narrower than the cell at its widest point. (For these cells see the figure of the male *Papilio dardanus* by G.R. Cunningham - van Someren, *EANHS Bull.* 1971:37). The vein nearest the body on the hindwing always curves away from the body in the

Papilionidae whereas in the other groups with six walking legs this vein is straight. These two characters, with others, are used by specialists to identify members of the genus *Papilio*. Below and between the eyes are two *palps*, small projections which protect the tongue when it is not in use; these are very small in Papilionidae, but large in the only group likely to be confused with it, the Pieridae.

The sexes are very difficult to distinguish, particularly from a 35mm slide, but some have different colours or patterns. When dealing with those that do not show such sexual dimorphism, turn the butterfly upside down with the head away from you and look at the extreme end of the abdomen. If there is a line down the centre as though the two parts hinge separately rather like a clam shell (which is what they do) then it is a male. If the end is covered with scales with an indeterminate hole, then it is a female. To carry out such an examination properly needs a little practice.

The *ova*, or eggs, are spherical and laid singly, usually a yellow colour at first, turning black just before the *larva*, or caterpillar, hatches. The larva is smooth (normally, but the young ones may have warts) looking like bird droppings at first, then later is usually some shade of green. Larvae can always be definitely identified by touching them, when a bright orange or yellow "V" shaped organ (*osmeterium*) is pushed out from behind the head which smells rather like rotting pineapples. The *pupa*, or chrysalis is very angular, with two prominent points on the head at the base of the antennae, and one point on the centre of the back. It is always held by a band of silk round the middle and a patch of silk at the tail. If it is held in this way but without the above characters it is not a *Papilio*.

M.P. Clifton, Entomologist,
The National Museum,
Box 40658, Nairobi.

WHERE ARE THE EMERALD SPOTTED WOOD - DOVES?

The sad song of the Emerald Spotted Wood-Dove *Turtur chalcospilos* has always been part of the background music of our section of Watamu beach (plot 28). On our return in August 1972 from a three month safari we were surprised not to hear the song at all. In November at least one bird started singing again. Except for a streak of pink and a flash of russet this dove was seldom seen, but in January 1973 two of these really lovely little doves started drinking every day at our birdbath.

After a five day absence we returned on 21st March to find one of the Wood-doves dead by the birdbath. It had been dead for some time and the ants had eaten all the skin and flesh from its head, leaving the skull exposed, but the rest of the bird seemed quite undamaged. There has been no further sign of the mate and although the dulcet burble of the waterbottle bird (White-browed Coucal) *Centropus superciliosus* and the trilling notes of the Pied Wagtail *Motacilla alba vidua* fill the air, the dove's sad little song is never heard.

Barbara Simpson,
Box 38, Malindi, Kenya.

NESTING PROBLEM OF MOSQUE SWALLOW *HIRUNDO SENEGALENSIS*

A pair of these swallows built a nest under the ceiling board at the camp house in Arusha National Park during the months of January and February 1972. They brought up two young. Their mud nest was a half ball-shaped chamber, with a long tubular entrance. The soil texture at Momela is a very fine sand which is unsuitable for mud nests, many of them collapse soon after construction or even before completion. The nest I am writing about collapsed suddenly when the fledglings came out to practice their first flight.

It was not until the beginning of 1973 that a pair turned up again and started to build another nest at the same spot. This time I decided to help the pair to build a firm nest, by providing them with a sticky red clay soil, obtained from Ngurdoto Crater rim, 9km away. I brought a 4 gallon tin full of clay which I poured into a rain-water pool in the road near the camp house. The operation was a bit difficult when it rained because there were so many rain-water pools in the road, where the birds used to flit from one to another and I had not enough red mud to put in them all. However, when the rain stopped and there were no more pools left, I selected the best place to put the red soil and a bucketful of water twice a day.

The birds mainly work in the early morning, retire during the heat of the day, and resume duty again in the late afternoon when the land cools down. The activity of building went on for about a month, and after completion, the pair started lining their nest with fine cotton-like material and feathers picked up from the camp compound and adjoining bushes. The nest looks strong and firm now, so I hope the pair will be able to use it successfully for a long time.

Sifaeli A. Mungure,
Arusha N. Park, (Kusare Research Camp),
Box 3134, Arusha, Tanzania.

- - - - - - - - - - - - - - -

DO YOU KNOW THAT:- PART IV

there are no such creatures as "Black Beetles". The cockroaches, to which the name refers, were an early and very successful group of insects which have been on earth since before coal was laid down. The are not beetles but closely related to the termites. Most of the species are brown, but in East Africa there are several black species.

bees can communicate with each other. They do this by dancing. When one of the foraging bees returns to the hive, having found a large number of flowers, it starts by waving its abdomen (tail-end) rapidly from side to side, exciting the bees around it. It then moves in a figure of eight on the comb, still waggling its tail. Taking the cross of the eight, the lines have different shapes. One line is straight, the other is curved. This straight line indicates to the other bees the angle between the sun and the flowers from the hive. The length of the line represents about 100m for every 2.5cm. Thus if the flowers are about 300m away from the hive, the line will be about 7.5cm long, so the bees now know the direction and distance of the food supply. It is much more complicated than this as the bee also takes into account head or tail winds, gusts, cross winds etc. The other bees can also go directly to the flowers from which the dancing bee has come as the scent is still on it. The dancing bee also feeds the other bees on the nectar it has obtained.

that some flies give gifts to their girl-friends. In the family Empidae the adults are voracious insectivores. The female is larger than the male, and so he would be caught and eaten if he did not take special precautions. He catches a small insect and wraps it up in silk (only a few adult insects can produce silk) and on finding a female, presents the neatly wrapped gift to her before pairing. As in so many branches of Natural History, now the cad comes in. Some male Empids wrap up stones in silk, others just present a lump of silk with nothing in it. The female, being inquisitive, gives the male enough time to pair with her before she drops the useless gift.

that many insects have territories which they defend, like mammals. If you look for the common butterfly, the Blue Pansy *Precis oenene* a species which is mostly black with a large blue spot on the hindwing and white bars near the tip of the forewing, you will find them settled on a bare piece of ground or on a grass stem on a lawn a little above the average height of the rest of the lawn. These are males on their territories. They chase all other insects away from an area of about 2m in each direction. Other males will dodge and swerve to get away from the pursuer, but the females just glide on, so the recognition signal is thought to be visual. Most of the Nymphalid have this territorial behaviour, *Charaxes* ssp. even going to the extent of having a saw along the edge of the forewing to cut their opponents wings to pieces! This behaviour is also known from other groups of insects, e.g. wasps, "hornets", beetles, dragonflies, etc.

some flies are able to fly backwards. The hover-flies, Syrphidae, hover over a spot on the ground, usually lighter in colour than the surrounding area, so that it can hold one position for long periods. These can be seen on any warm day, usually in dappled sunlight under trees. If the fly is approached slowly from in front, it will move backwards until you are past its hovering point, when it will dodge round you to haver over its spot once more. If it is approached quickly it will fly sideways, then quickly away from you, returning when you have passed. We do not yet know the purpose of the hovering as both sexes do it, thus probably cancelling out the idea of territorial or sexual display.

M.P. Clifton, Entomologist,
National Museum,
Box 40658,
Nairobi.

- - - - - - - - - - - - - -

LETTERS TO THE EDITOR

Sir,

With reference to the letter from Dr D.L. Ebbels in the January 1973 issue of the *Bulletin*, three illustrated papers under the general title Identification of the spoor and dung of East African Mammals were published by Dr P.R. Hesse in 1954-58. *Part 1. The Antelopes* first appeared in the Society's *Journal* 22 (95):107-110 + 4 plates, in 1954. This part was subsequently reprinted in *African Wild Life* 11 (3):200-207, in 1957. *Part 2. The carnivores, ant-bear and hyrax* appeared in *African Wild Life*, 11 (4): 316-322; this includes quite a wide range of the carnivores from the big cats down to the dwarf mongoose. *Part 3. Elephant, giraffe, horse, cattle and pigs* appeared in *African Wild Life*, 12 (1): 58-63.

Turning now to the subject of the giraffe's voice, apparently the animal rarely makes any sounds. Blayney Percival, who was I think the first Game Warden in Kenya, wrote in *A Game Ranger's Note Book:* "The giraffe was for long supposed to be incapable of uttering any sound at all; they are extremely silent creatures and it was not until the latter part of 1911, when I had had a good many years' experience with game in Africa, that I first heard one raise its voice. I was sitting in a blind with my camera over a water-hole, giraffe and zebra before me, when I heard a curious cry; it was something like the bleating of a sheep, but infinitely softer. I am puzzled to express it in writing, but the syllables that most nearly represent it are "wa ray" rather prolonged. It was so soft that I could only just hear it at 50 yards. I was by no means sure that it *was* the voice of a giraffe, but it came so plainly from the direction of a cow that I watched her through my glasses and saw her mouth opened to utter the call. I may add that I have never again heard a giraffe's voice."

Dr Clive Spinage, in *The Book of the Giraffe*, also discusses the various sounds made by this animal. He refers to "a reverberating snort" given in the presence of danger; "a short gutteral bleat like that of the stag", given by the male during rut, and "a low grunt followed by a louder barking grunt" made by a male giraffe at the London Zoo when it tried to attack Dr Ludwig Koch through the barrier of its enclosure. He goes on: "Some Africans have reported that the Giraffe will bellow when attacked by a lion, and male giraffes have been recorded as making a mooing noise while females have even been recorded as snoring. There is always the need to distinguish between true vocal sounds involving the use of the larynx, and mere snortings and gruntings caused otherwise. But there is no doubt that the giraffe has a voice, though its mode of life is such that it need rarely use it".

Jane B. Walker,
Box 12517, Onderstepoort,
Pretoria, South Africa.

Sir,

While on a game drive in the Nduta - Oldavai Gorge area during August 1971, we spotted a Rhino without external ears. It was identical with Fixie of Amboseli fame. George Dove reports that it has not been seen since.

Gerald Rilling,
Box 40469, Nairobi.

Sir,

IDENTIFICATION OF KITES

As many members will know, I am interested in the diseases and causes of mortality of birds of prey, both diurnal and nocturnal. As some of the material is submitted for pesticide analysis it is important that I know the species, race and age of all birds I examine.

A problem which I have is that of distinguishing between the two common races of the Black Kite *Milvus migrans*. The adult African (yellow-billed) race *M. m. parasitus* is, of course, distinguishable by its yellow bill colour but confusion arises when dealing with the immature of this race since the bill is then black as in the adult and immature of the European race *M. m. migrans*. Other morphological features are slight: Brown & Amadon, (1968) describe *parasitus* as being "less rufous, more cinnamon below than *migrans*" but I have two hand-reared kites (both born in Kenya and, therefore both *parasitus*) which fit Brown & Amadon's description of *parasitus* and *migrans* respectively! The same authors also describe the fork of the tail as being less pronounced in immature kites than in adults but this feature is extremely difficult to compare. A particularly valuable guide to the two races is, of course their size. Brown & Amadon give the following weight ranges for the two sexes:

	M. m. migrans	*M. m. parasitus*
Male	660-850g	567-650g
Female	750-1076g	617-682g

The figures for *M. m. migrans* are borne out by von Blotzheim, Bauer & Bezzel (1971) who give weights of 630-928g for males and 750-941g for females. The heighest weight they record for the species is 1030g but they also refer to a paper from Zambia in which a figure of 500g is given - possibly *parasitus* ? These weights, coupled with wing length can undoubtedly assist in identification but even so there can be confusion as both weights and wing measurements overlap. For example, my two captive *parasitus* (referred to above) weigh 640g and 750g respectively. The former would probably be considered to be *parasitus* but could be a small male *migrans*; the latter could be a female *parasitus* or either male or female *migrans*.

In a number of my *post-mortem* specimens I am able to distinguish the race by careful examination of the bill. It appears that the bill of *parasitus* turns yellow after about one year of life and observation of a captive specimen has shown that this process is gradual, taking several weeks for completion. Such subadult specimens can often be accurately identified as *parasitus* on account of the definite yellowish tendency in the bill colouration. It is however individuals with completely black bills that pose problems since they could be immature or adult *migrans* or immature *parasitus*. I attempt to "age" them by weighing them and then, if as frequently happens, they fall between 600-700g, examine the feet for evidence of "wear and tear" and the gonads for signs of reproductive activity; such findings are strongly suggestive that the bird is an adult and hence *migrans*.

The purpose of this letter is to draw attention to this problem in the hope that other members may have discovered alternative aids to distinguishing these two races.

J.E. Cooper,
c/o Veterinary Research Laboratory,
P.O. Kabete, Kenya.

REFERENCES:

Brown, L.H. & Amadon, D. 1970. *Eagles, Hawks and Falcons of the World.* Feltham: Hamlyn for Country Life Books.

Glutz von Blotzheim, U.N., Bauer, K.M. & Bezzel, E. 1971. *Handbuch der Vögel Mitteleuropas.* Vol.4. Frankfurt/Main:Akademische Verlagsgesellschaft.

Sir,

ELEONORA'S FALCON *FALCO ELEONARAE*

I was interested in Colin Corfield's letter in the March *Bulletin*:43-44 and the Editor's appended comments. In March 1973 I had the good fortune to have excellent views of at least two Eleonora's Falcons in Tanzania. The first was seen perched in a roadside tree about 110km north east of Iringa on the main Morogoro - Iringa road on 18th March. It looked like a giant Hobby *F. subbuteo* and showed no alarm when I stopped the car. At about 15m range I was able, with binoculars, to see the dark orange buff underparts heavily streaked with black and becoming rufous on the belly and the undertail coverts. The head and nape were black and the face, cheeks and throat were pure white. A narrow, square ended moustachial stripe extended from the eye. The upperparts were very dark brownish grey and the black wing tips extended to the tail tip. The underside of the tail appeared to be faintly barred. The cere, iris, feet and toes were yellowish; the bill was grey. After a few minutes the bird took off and flew with an easy direct flight to another perch. In flight it looked more slender than a Hobby probably on account of the noticeably longer tail and wings. During its short flight it was mobbed by several *Cisticola* warblers.

On 21st March I saw what I thought was another Eleonora's Falcon flying rapidly low over the open grass plains of Mikumi National Park about 160km further north east. On 22nd March what was certainly an Eleonora's Falcon was seen in the same area. It was also flying low and rapidly; apparently hunting. In flight the white on the cheeks and throat contrasted with the dark underparts and the long-winged, long-tailed silhouette gave it a very distinct appearance. This second bird appeared to be very similar in plumage to the bird seen on 18th March but with darker underparts.

Both at rest and in flight the bird looked about the size of a slender, male Peregrine Falcon *F. peregrinus*. I was able to confirm this impression with a view of this latter species over Morogoro on 22nd March.

W.G. Harvey,
Box 9100,
Dar es Salaam.

Sir,

SADDLE - BILL STORKS

On the night of 24th March 1973 my family were at the new Meru Mulika Lodge where there is a viewing lounge facing a swamp area and waterhole. The area between the lodge and waterhole is dimly lit after dark, but the waterhole itself does not appear to be lighted. Using a pair of 8 X 30 binoculars with red-tinted lenses we were able to observe a Saddle-bill Stork *Ephippiorhynchus senegalensis* feeding busily along the edges of the waterhole for more than two hours. The literature indicates that these birds are uncommon, even rare, in Kenya. As I have never seen one active in the daylight hours I wonder if perhaps they are regular nocturnal feeders and therefore not generally observed, rather than uncommon residents.

Nancy S. Lassus,
Box 30518, Nairobi.

Sir,

SEA SNAKES

In doing research for my forthcoming book on snakes, I have come across an interesting report with regard to Sea Snakes.

John Stidworthy in his "Snakes of the World" records the sighting of a large concentration of Sea Snakes, though the reasons for and frequency of these concentrations are not known. Kenneth MacLeish in his article "Diving with Sea Snakes' in *National Geographic*, April 1972 records that Sea Snakes are not eaten by fish in the Pacific Ocean except possibly by Maori Cod. The fish he looked at were snappers and groupers though he mentions that Sea Snakes are sometimes found in Shark stomach contents.

Mr George Mathews of the U.S. Sport Fishing Team reports (pers. comm.) that, particularly when concentrated, Sea Snakes are eaten in great numbers by Sailfish. I would be very much interested in receiving any information about this. A couple of points in particular: do the fish get bitten at all and do the Sailfish kill the snakes before eating them ?

Gerald Rilling,
Box 40469, Nairobi.

- - - - - - - - - - - - - -

MORE UNUSUAL LARIDS IN TANZANIA - AN OMISSION

The following paragraph was omitted from W.G. Harvey's notes on p.51 of the April issue of the *Bulletin*, it should follow on as paragraph two of his note on Lesser Black-backed and Herring Gulls. I am sorry about this.

HERRING GULL *Larus argentatus*

A bird that was certainly a Herring Gull was seen on the Ocean Road flats in Dar es Salaam from 22nd - 24th December 1972 and further up the coast at

Kawe on 31st December. It appeared larger than the Lesser Black-backs with a much paler grey mantle. The wings, head and underparts were flecked with brown and the tail had a narrow brownish sub terminal band. The bill was dusky yellowish with a dark tip and the feet and toes were flesh coloured. It consorted with Lesser Black-backs and I was able to compare it with both the black-backed *fuscus* and the dark grey-backed race (possibly *heuglini*) mentioned above. It was much paler than both and resembled the nominate *argentatus* in the plumage of a bird late in its second winter.

W.G.H.

- - - - - - - - - - - - - - -

SOCIETY FUNCTIONS

Sunday 6th May 1973: Mrs F. Ng'weno will lead a botanical excursion in the Nairobi area. Please meet at the National Museum at 9 a.m. sharp. Bring a picnic lunch if you like as the excursion will go on into the afternoon.

Monday 14th May 1973 at 5.15 p.m.: At the National Museum Hall, Nairobi. Mrs Jean Brown of the Institute of African Studies of the University of Nairobi, will give an illustrated lecture on "Adaptations to the Environment" (the use of natural materials in the arts and crafts of the peoples of Kenya).

Saturday 26th May 1973: Miss P.M. Allen will lead a bird walk in a locality near Nairobi, depending on the weather. Please meet at the National Museum at 2.30 p.m. and bring a picnic tea.

16th/17th June 1973: Visit to "Mountain Lodge". This lodge has been booked for the Society for shs. 90/- per person for tea, dinner and breakfast and of course game viewing. No children under twelve. Members should make their own way to the lodge which is on the slopes of Mt. Kenya, and arrive before 4 p.m.. To reach the lodge, follow the main road through Thika, Fort Hall, Sagana and Kiganjo. The way to the lodge is signposted from the Nanyuki turn-off on the Nyeri road. There is an alternative route to the lodge which is signposted from Karatina, but as this passes over red soil roads it is not recommended if it is wet. If you intend to come, please write to the Secretary enclosing your cheque.

Monday 9th July 1973 at 5.15 p.m.: at the National Museum Hall, Nairobi. Dr K.R. Bock of E.A.A.F.R.O. will give an illustrated lecture on "Fishes o the Kenya Reef".

- - - - - - - - - - - - - - -

NEW MEMBERS - MAY 1973

Full members:

Mrs Ute-Marie Bauei, Box 45009, Nairobi.
Mrs Nancy Donovan, Box 30772, Nairobi.
Mr Stig Drevemo, Vet. Res. Lab., P.O. Kabete.
Mr Nicolas Georgiadis, Box 42851, Nairobi.

Full members: contd.

Mrs Frank Minot, Box 47487, Nairobi.
Mrs D.Y. Morgan, British Council, Box 40751, Nairobi.
Mr Roger Ruvell, Box 14394, Nairobi.
Mr Donald B. Thomas, Box 14893, Nairobi.
Miss Maureen M. Thompson, Box 21027, Nairobi.
Mrs Williams-Chandley, British High Commission, Box 30465, Nairobi.

- - - - - - - - - - - - - - -

SOME RECENT PERIODIC LITERATURE AVAILABLE IN THE LIBRARY

Berger, M.E. 1972. Live weights and body measurements of Olive Baboons *Papio anubis* in the Laikipia district of Kenya. *J.Mammal.* 53:404.

Carcasson, R.H. 1972. Revisional notes on the African Sphingidae. *J. Ent.(B)* 41:175.

Hofmann, R.R. & Stewart, D.R.M. 1972. Grazer or browser: a classification based on the stomach structure and feeding habits of East African ruminants. *Mammalia* 36:226.

Sands, W.A. 1972. The soldierless Termites of Africa (Isoptera:Termitidae). *Bull. Brit. Mus. Ent.* Suppl.18.

Sidorowicz, J. 1971. Zoogeographical regionalisation of the world based on the distribution of the members of the order Carnivora (Mammalia). *Acta Zool. Cracoviensia* 16. No.6.

Smith, G.A. 1972. Some observations on Ring-necked Parakeets *Psittacula krameri*. *Avicultural Mag.* 78:120.

Ulfstrand, S, & Södergren, A. 1972. Organochlorine residues in East African birds. *Ambio* Vol.1, p.150.

- - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings.

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

CONTENTS

An introduction to the Natural History of Mwanza Gulf, Smith Sound and adjacent areas, Tanzania - 2 Animal life 78

Calling and flight display of male Trogons 81

Notes from Watamu 83

Lesser Golden Plovers near Dar es Salaam 84

Unusual nest sites 85

A Honey Buzzard at Karen 86

The Straw-coloured Fruit Bat in Dar es Salaam 86

Silver bird at Karen 87

Nest Record Scheme - New address 88

Appeal - Save the Joy Adamson paintings 88

Letter to the Editor 89

The arrangement of the Library 89

The Solar Eclipse of 30th June 1973 91

Society Functions 91

New Members 92

AN INTRODUCTION TO THE NATURAL HISTORY OF MWANZA GULF, SMITH SOUND AND ADJACENT AREAS, TANZANIA

2. Animal life*

MAMMALS

To the west of Mwanza Gulf and Smith Sound lies one of the most densely populated parts of Usukuma (and, indeed, of Tanzania) Mwanza District, averaging 144 persons per square mile in 1957 (Abrahams, 1967). However, apart from Mwanza town, there is no settlement which could not be called a village. Some parts of the Sound are remote from the main travel routes, especially the extreme south and south-west, and are probably seldom visited by non-residents of these areas.

As might be expected, few of the larger indigenous mammals remain in this area, especially in the more densely populated Mwanza and Kwimba Districts. However, Hippos *Hippopotamus amphibius* are seen quite frequently at Mwanza (near the Northport passenger terminal), at Kamanga, and are doubtless more numerous further south. Spotted Hyaenas *Crocuta crocuta* are common in many places, especially near human habitation, but are strictly nocturnal. They are a nuisance at Bwiru, but at Ukiriguru their numbers have recently declined, although they were formerly very common. The rocky hills near the Sound shelter a variety of smaller mammals such as Kirk's Dikdik *Rhynchotragus kirkii* (which is common), a very large population of Rock Hyrax *Heterohyrax brucei*, many Porcupines *Hystrix galeata* (which often cause damage to young cotton crops) and of course a large number of the smaller rodents. Bush Pig *Potamochoerus porcus* and the Side-striped Jackall *Canis adustus* are fairly numerous. A few Leopards *Panthera pardus* probably occur on the larger kopjes; there have been unconfirmed reports from Bwiru and Bukumbi in recent years. Black-faced Vervet Monkeys *Ceropithecus aethiops* also frequent the kopjes but are uncommon except in Mwanza town, where a resident troop exist as scavengers. Baboons *Papio anubis* were formerly numerous, but very few now remain in the northern parts of the area, where I have seen none, but a few doubtless survive destruction by the pest control squads. Both the Dwarf and the Black-tipped Mongooses *Helogale undulata* and *Herpestes sanguineus* are common, as also is the large White-tailed Mongoose *Ichneumia albicauda* although, being nocturnal, the latter is less often seen. Other small mammals which frequent arable land as well as kopjes include the Genets, the Ratel *Mellivora capensis*, and the African Hare *Lepus capensis* (in more open grassy places). Squirrels and Hedgehogs seem conspicuously absent from this area; I have not seen any nearer than Mwadui Diamond Mine (Shinyanga) where they are common. (There is also a small herd of Thomson's Gazelle *Gazella thomsonii* interestingly isolated there within the outer security fence.) Large numbers of bats of several species occur. The most conspicuous, although probably one of the least numerous, is the Yellow-winged Bat *Lavia frons*, while the Angola Free-tailed Bat *Tadarida condylura* often inhabits the roofs of buildings in considerable numbers.

---

* Part I appeared in the January 1972 issue of the *Bulletin* with a map of the area on p.4.

There is an extensive area of flat mbuga to the east of the southern end of Smith Sound where apparently Impala *Aepyceros melampus* can still be found and are shot whenever possible by local hunters. Bushbuck *Tragelaphus scriptus* and doubtless other species of antelope, such as Reedbuck *Redunca redunca* and Defassa Waterbuck *Kobus defassa,* also occur in small numbers on the less populated shores of the sound, but the general impression is of declining numbers of the larger animals in the face of pressure from an expanding and increasingly well-armed human population.

BIRDS

Most of the common East African water birds occur in considerable numbers here, especially those species which inhabit open papyrus beds or their margins. Ducks seem uncommon on the open water, preferring instead the neighbouring marshes where, together with Spur-winged and Knob-billed Geese *Plectropterus gambensis* and *Sarkidiornis melanota,* they apparently provided excellent shooting, but it is unlikely that this was the cause of the apparent decline in their numbers in the last few years. Several species of Weaver are common in the papyrus, notably the beautiful Golden-backed Weaver *Ploceus jacksoni,* and at Kigongo one may sometimes see the Blue-headed Coucal *Centropus monachus* in the early morning. Marsh Flycatchers *Muscicapa aquatica* and the Red-chested Sunbird *Nectarinia erythroceria* are common only at the water's edge. One of the most characteristic birds of the Lake margins is the Pied Kingfisher *Ceryle rudis.* Large populations of this species are to be found, especially where the papyrus beds are discontinuous or narrow. At Busisi one can often count as many as 20 pairs of Pied Kingfishers in the immediate vicinity of the ferry terminal; many of them seem to breed in a disused murram pit in the centre of the village. Pairs of African Fish Eagles *Haliaeetus vocifer* are spaced rather regularly along the shores of the Sound. Between Mwanza and Kigingo they probably average about one pair per 2km, a density comparable with that found along parts of the eastern shores of Lake Albert by Green (1964). Similarly, they are less numerous where the shore is flatter and where papyrus beds are very large, offering few vantage points or nesting sites. On sparsely wooded rocky shores Hammerkop *Scopus umbretta* nests are more often placed on the top of tall boulders than in trees. On the open waters away from the shore, the Long-tailed and White-necked Cormorants *Phalacrocorax africanus* and *P. carbo* are the commonest birds. Lesser Black-backed Gulls *Larus fuscus* may often be seen from the Kigongo - Busisi ferry during the months of the northern winter, and White-winged Black Tern *Sterna leucoptera* commonly occur, possibly using the Sound as a convenient route for movements north or south. The Cormorants, together with a lesser number of African Darters *Anhinga rufa* and Yellow-billed Storks *Ibis ibis,* breed from about April to June on one or two small rocky islands near the tip of the promontory separating Stuhlmann and Smith Sounds. These colonies are not large, together probably containing about 700 nests of all species, but I know of no other waterfowl breeding colonies in the area. Possibly there are others in the more remote parts, or perhaps in seasonal marshes away from the Lake, like the large heronry found in the Wembere Mbuga (220km to the south-east) by Stronach (1968). Black-headed Herons *Ardea melanocephala* and Cattle Egrets *Ardeola ibis,* which here feed in dry habitats, may breed many miles from extensive areas of marsh or water. Both species appear to roost on the Lake shore, however, as there is a daily movement to and from the Lake at dusk and dawn.

Apart from Fish Eagles, the commonest raptors are the African Kite *Milvus migrans parasitus*, Augur Buzzard *Buteo rufofuscus augur*, Harrier Hawk *Polyboroides radiatus*, and the Dark Chanting Goshawk *Melierax metabates*. Migratory species, such as the Black Kites, Tawny Eagles *Aquila rapax*, and Lesser Kestrels *Falco naumanni*, often pass over in considerable flocks from the north-east to the south and south-west at the beginning of the rains in October. White-bellied Storks *Ciconia abdimii* also arrive at this time and are frequently seen in large numbers soaring in updraughts, especially over the rocky hills. Spotted Eagle Owls *Bubo africanus* are quite numerous on the kopjes and the Bat Hawk *Macheirhamphus alcinus* is commonly seen at Ukiriguru. Vultures are uncommon in this area, the White-headed Vulture *Trigonoceps occipitalis* being the only representative of this group occurring at all frequently.

Pigeons are especially numerous on the kopjes, the commonest being the Speckled Pigeon *Columba guinea*, and the Ring-necked and Laughing Doves, *Streptopelia capicola* and *S. senegalensis*. Cliff Chats *Monticola cinnamomeiventris* are also common, and the Red-necked Spurfowl *Francolinus afer* seems to survive in fair numbers despite predation by local hunters. Guineafowl are rare, as also are woodpeckers, which might be expected from the state of disafforestation. Flocks of European Bee-eaters *Merops apiaster* are common during October to April and the Little Bee-eater *M. pusillus* is a common resident. Many species of Bishops, Whydahs, Finches and Waxbills are among the commonest birds in the cultivated areas. Mixed parties of Blue-capped and Red-cheeked Cordon-bleus, *Estrilda cyanocephala* and *E. bengala*, Purple Grenadiers *E. ianthinogaster*, Yellow-fronted Canaries *Serinus mozambicus*, Streaky and Yellow-rumped Seedeaters *S. striolatus* and *S. atrogularis*, are a common sight feeding amonst seeding grasses.

REPTILES

Although crocodiles were apparently sufficiently numerous in this area to attract crocodile hunters until perhaps 20 years ago, they are evidently very scarce now and I have not seen or heard of any in the last five years. The Nile Monitor *Varanus niloticus* however, is common, and specimens up to 2m in length may often be seen swimming at the margins of papyrus beds. Savannah Monitors *V. exanthematicus* are equally common on the shores, but specimens larger than 1.5m are seldom seen. The extensive papyrus swamps around the margins of the Sound would seem an excellent habitat for Pythons, which undoubtedly occur, but are seldom seen. The snakes which are most frequently observed in this area are the thin, green, arboreal *Philothamnus* spp., the grass snakes and striped sand snakes, *Psammophis* spp., the common Tiger Snake *Telescopus semiannulatus*, the Black-necked Spitting Cobra *Naja nigricollis*, and the Puff Adder *Bitis arietans*.

Lizards, of course, are very common and include several species of skinks and one or two agamids; the common one with males coloured pink on the head and shoulders and blue on the body, and a larger, more arboreal species (perhaps not an agamid) in which the males have the head bright blue in the breeding season and a greenish-brown body. The pink and blue agamids are characteristic of gardens and rocky places, bobbing their heads and seemingly doing press-ups when mildly disturbed. They are omnivorus and voracious feeders and have been seen to take small nestlings, although the bulk of their diet seems to be insects.

Terrapins are common in small dams and wet places throughout this area and tortoises are fairly common in drier habitats.

D.L. Ebbels,
Ukiriguru,
Box 1433,
Mwanza, Tanzania.

REFERENCES:

Abrahams, R.G. (1967) *The peoples of greater Unyamwezi, Tanzania.* London: International African Institute.

Green, J. (1964) The numbers and distribution of the African fish eagle, *Haliaetus vocifer*, on the eastern shores of Lake Albert. *Ibis* 106:125-128.

Stronach, B.W.H. (1968) The Chagana heronry in western Tanzania. *Ibis* 110:345-347.

- - - - - - - - - - - - - - -

CALLING AND FLIGHT DISPLAY ASSEMBLY OF MALE TROGONS

Narina's Trogon *Apaloderma narina* is territorial for the greater part of the year and in my study area at Karen, near Nairobi, Kenya, which consists of a 5ha block of little disturbed forest with well treed gardens nearby plus a stretch of indigenous forest along the roadside opposite, again with well treed gardens adjacent. In all this area, some 30ha, there are known territories of four pairs and there are others not so well known outside.

Brown (1970) has described some aspects of the courtship and display with calling, as witnessed, particularly in another area of forest at Karen. He remarks that at times there was display by several males before a female while sometimes a male would associate with more than one female. This note records an additional form of pre-breeding season activity in which only males take part or possibly an assembly of males displaying while the females are engaged in incubating. Brown also writes - "the fact that several males were calling in this small area suggests the possibility of some sort of display ground to which females are attracted". This account is certainly concerned with an advertisement display by several males but without the presence of females, however, its functions has not yet been determined but adds another aspect to the behaviour of trogons which requires following up in more detail.

My attention was drawn to the birds on account of their persistent calling and from the differing notes it was clear that several birds were involved. The first encounter with them was just after 08.00h on 30th October 1972, when five males were found sitting within a few metres of each other in a tree in the forest along the edge of the road. One bird was calling and when it ceased a second would call, then a third, each in turn or two would call either in unison or alternately. So intent were they with their calling that very close approach was possible.

At times one bird would leave and fly to another tree where it would call, nine to nineteen times "Whoo-whoo" (the second note lower) then a second bird would fly over to settle near the first while the others, each in turn, would follow and each, on alighting, would call. Some flights were made after prey but others voluntarily to a new stance but they were obviously not feeding in association though prey would be taken if spotted. On several occasions one bird would deliberately fly over to another and drive it from its perch then the second bird, at times, would be driven off by a third. Each, on settling, would commence calling to be followed by the others. In this way the party moved slowly from branch to branch or tree to tree. From the narrow strip of forest the party moved out into the trees in the gardens adjacent and so right away from any territories. No female bird was seen on any occasion.

In flight it appeared that the birds were exposing a greater area of the white outer tail feathers than in normal flight and particularly when the bird settled, it would fan out the tail; the white outer tail feathers were certainly very conspicuous. Flight is generally somewhat undulating, the bird first swoops downwards from the branch and rises to settle again. The tail is fanned and then strongly depressed so that no white is exposed when viewed from the rear. The red breast and flank feathers are well fluffed up and conspicuous.

The male assemblies commenced around 08.00h gathering at more or less the same spot in the roadside forest adjacent to one territory. This activity continued daily for a period of fourteen days with a variable number of birds taking part, from three to five on three mornings and seven on two other mornings. They followed, by and large, the same route through the forest and out into the more open gardens. No one bird appeared to dominate these calling sessions nor was there a particular bird initiating a move from branch to branch or tree to tree, however, each time a bird did move away all the others gradually followed. By 09.30h the birds had covered a considerable area in the gardens and then gradually they returned to the forest and disappeared.

A visit was made to the four known territories while the males were away at the assembly display ritual and while no males could be found, females were located at two of the territories. After the males had dispersed by 10.00h they were found to have returned to their territories and two such birds were followed from the forest across the road from the assembly point.

Breeding is recorded by Brown (*op. cit.*) as March to May, the long rains period. Van Someren (1958) records a nest at Karen, though the date is not mentioned in his book, but it was in May 1942 and in the 5ha patch of forest. The long rains in 1972 were generally poor and badly distributed and there was comparatively little breeding, however, the short rains period, September and October was also below average but November was wet with fifteen days of rain and this induced many species to breed in November/December whereas they would normally nest in September/October, particularly Hartlaub's Plantain-eater (Turaco) *Tauraco hartlaubi* and the Bee-eaters *Merops oreobates* which are resident regular breeders in the study area. Brown (*op. cit.*) writes - "the onset of rains apparently stimulates breeding" and with this the writer most certainly agrees. It is suggested that as the normal onset of the short rains in 1972 was delayed, so the birds delayed breeding at the normal time; but once the rains *did* break in November, activity was stimulated so this all male calling and display assembly was either a preliminary function heralding the onset of sexual activity (later leading to breeding), or it is also possible that these displays are activitated after the females have commenced incubation. This hypothesis will have to be checked by locating the nests firstly and observing behaviour at the nest of each pair.

Behaviour of females in their territories in November certainly suggested breeding though no definite nest holes were located. Suitable nesting holes in our forest are many and are difficult to locate, however two young birds, attended each by their parents, were seen in early February 1973, which suggests that breeding did take place between October and December.

Just what this advertisement ritual function is must remain unanswered at present but it is certainly part of the birds sexual display at breeding time and adds another facet to the behaviour pattern already given by Brown (*op. cit.*) but more study is required to fit this facet into the whole complex of the breeding behaviour of Trogons.

G.R. Cunningham - van Someren,
Box 24947,
Karen.

REFERENCES:

Brown, L.H. (1970) Recent new breeding records for Kenya. *Bull.Br.Orn.Club.* 90:3-5.

van Someren, V.D. (1958) *A bird watcher in Kenya.* Edinburgh: Oliver & Boyd.

- - - - - - - - - - - - - - -

NOTES FROM WATAMU

1. TERNS FEEDING ON TERMITES. On 29th April 1973 approximately 70mm of rain fell at Watamu during the day. This resulted in large swarms of alate termites. During the afternoon, from about 14.00h to 17.00h some numbers of terns hawked these insects over the point at the north entrance to Mida Creek and some 300m inland over the large new parking space at the end of the road. About 15 individuals of the Roseate Tern *Sterna dougallii*, two White-cheeked terns *S. repressa* and one Little Tern *S. albifrons* were certainly identified, while it was also suspected that Lesser Crested Terns *S. bengalensis* took termites which had drifted out to sea. All these terns caught the termites in the bill, and were inexpert, missing the flying insects in several swoops, but finally catching most of them.

I have, on previous occasions, seen terns (*S. leucoptera*) feeding inland on Army Worm, but have never seen them taking termites. On the following day, en route to Mombasa in pouring rain, 10 + *S. dougallii* were similarly hawking over the main road where it passes the head of Mida Creek. When hawking the termites in heavy rain the terns periodically shook themselves dry, as Hobbies *Falco subbuteo* do in similar conditions.

2. LITTLE TERNS IN MIDA CREEK. On 24th and 28th April 1973 respectively, three and five Little Terns *Sterna albifrons* were seen fishing the edge of the rising tide on the mudflats of Mida Creek. Evidently, Little Terns occur in Mida up to the end of April. They apparently fish for only a short period when the tide is flooding over the mudflats, and in shallow water only an

inch or two deep, following the edge of the flowing tide.

3. REDSHANKS IN MIDA CREEK. Two undoubtedly identified Common Redshanks *Tringa totanus* were seen in Mida Creek on 24th April 1973. No April records for this species are given by Backhurst, Britton & Mann (1973) *Jl.E.Africa nat.Hist Soc. & nat.Mus.* 140:20, so that this record apparently extends the period in which this species is known to occur in Kenya. They were among a throng of other waders, but easily identified both by plumage and call when disturbed.

4. CUCKOOS FROM WATAMU. Between 20th and 30th April 1973 several cuckoos were seen daily on my plot at Watamu, which is at the entrance to Mida Creek. All were purposefully flying across the creek southwards, as were the suspected *Cuculus poliocephalus* recorded by me in *EANHS Bull.* 1971:117. On 24th April, in the Arabuko Sokoke Forest, several grey cuckoos were seen, either the European Cuckoo *C. canorus* or the Lesser Cuckoo *C. poliocephalus* or possibly both; no clear direction of movement was discerned in these cases. It is interesting that there is an apparent quite large scale, purposeful, southward movement of grey cuckoos, species not finally determined, along the Watamu seafront in late April, possibly associated with heavy rain following the onset of the monsoon.

(On 4th April 1972 I saw five European Cuckoos flying south along the mangroves in Mida Creek and two flew south the next day. No Lesser Cuckoos were seen on these two days although two had been seen on 2nd April 1972. Ed.).

L.H. Brown,
Box 24916,
Karen.

LESSER GOLDEN PLOVERS *PLUVIALIS DOMINICA*

NEAR DAR ES SALAAM IN TANZANIA

On 19th and 21st April 1973, I had excellent views of two Lesser Golden Plovers resting on the embankment of Msasani salt pans 10km north of central Dar es Salaam. They were resting with large flocks of other Palaearctic waders waiting for the tide to drop, and associated particularly with Grey Plovers *Pluvialis squatarola*.

I was able to watch them for a total of thirty minutes both in flight and at rest and down to 15m with 10 X 50 binoculars. They were considerably smaller than Grey Plovers and of lighter build. At a distance their size, more erect stance and longer tarsi made them immediately distinguishable. Their stance and coloration most closely resembled Reeves *Philomachus pugnax*. In size they appeared slightly larger than nearby Greater Sand Plovers *Charadrius leschenaulti* with proportionally larger bodies and smaller heads.

The following plumage details were noted:

HEAD AND NECK:	pale yellowish buff with distinct dark brown ear coverts and crowns.
UNDERPARTS:	breast greyer buff with light brownish streakings. Belly and undertail coverts greyish white.
UPPERPARTS:	bright yellowish buff with dark brown centres to feathers, particularly distinctive on the mantle. Tail finely barred dark brown. Wings dark brown. No distinctive markings on upperparts showed in flight but the smokey grey underwing was well seen.
SOFT PARTS:	Bill and iris dark. Tarsi long and grey.

The birds were restless, moving constantly among the more stationary Grey Plovers and frequently calling both at rest and in flight. The call was a short liquid "tueet" with a questioning rise in the last syllable.

The birds were not seen after 21st April.

W.G. Harvey,
Box 9100,
Dar es Salaam.

- - - - - - - - - - - - - - -

UNUSUAL NEST SITES

A large number of boats, cabin cruisers and the like, are moored at the Lake Naivasha Marina Club and each Friday they are taken from their moorings to the jetty for a clean up in preparation for the weekend activities. Over the past three months, January to March, many nests of the Speckled Pigeon *Columba guinea* have been found in the cabins or cockpits and even young on boats that are seldom used. On one occasion the nest, of a few twigs and the white eggs were taken and placed at the end of the jetty, where the parent birds found them and brooded, despite the human activities all around. This is a most awkward situation for the men do not like destroying the nests but what is the alternative ? I have suggested nest boxes placed on poles in the water amongst the boats, in the hope of attracting the birds away to a more secure nest site.

Mrs Lee told me that some 18 months ago she found two brown and black scrawled and marked eggs in the ashtray in the cabin of her cruiser. These were fresh eggs of the Lilytrotter *Actophilornis africana.* She took photographs of this unusual nest. I use the name Lilytrotter purposely as it is so far more appropriate than Jacana. On another occasion, Mrs Lee found an unidentified small white egg in her boat.

G.R. Cunningham - van Someren,
Box 24947, Karen.

- - - - - - - - - - - - - - -

A HONEY BUZZARD AT KAREN

On 23rd February 1973, I saw an immature Honey Buzzard *Pernis apivororus* at Karen. It perched on top of a green leafy tree beside the drive of my house and permitted close examination. This is actually the third Honey Buzzard I have seen on my property at Karen, all of them since 1971. Other recent records suggest to me that this species may be visiting the Nairobi area more frequently than in the past. Several other Karen residents (Dr Candler *et al.)* have reported suspected Honey Buzzards to me, but I have not been able to confirm identification in these cases.

L.H. Brown,
Box 24916,
Karen.

- - - - - - - - - - - - - - -

THE STRAW - COLOURED FRUIT BAT *EIDOLON HELVUM*
IN DAR ES SALAAM

Mr J.F. Harper (*EANHS Bull.* 1972:157-158) reported an incident in which a medium-sized fruit bat was found apparently electrocuted on overhead power wires.

On three occasions recently on the University of Dar es Salaam campus, the Straw-coloured Fruit Bat has been found dead on overhead power wires, also apparently electrocuted. In the first instance, Mr N. Gardiner informed me that there was a large dead bat hanging on some power wires along a campus road. Despite numerous attempts, I failed to dislodge this bat, its toes having locked around the wires. Some time later, on 31st December 1972, Dr B.J. Harris, who had also seen the bat, gave me the skull which he had found with other bones of the skeleton when the body of the bat rotted and fell from the wires. The skull I identified as that of *Eidolon helvum* and catalogued as UDSM-M-148 in the University vertebrate collection.

The second specimen of *E. helvum*, obtained on 8th February 1973, was an adult lactating female which was given to me by a grounds worker who said he had seen the bat dead on the power lines and had managed to remove it.

The third specimen, an adult female, was given to me by Dr B.J. Harris. It was also found on overhead power wires very near the location of the first specimen, on 3rd April 1973.

To the best of my knowledge, these three specimens represent the first records of *E. helvum* from Dar es Salaam. Swynnerton & Hayman (1951) record this species from Zanzibar and Pemba Islands as well as from other localities far inland. Mutere (1965), in a map showing the locations of colonies of *E. helvum* in East Africa, does not indicate the presence of a colony in Dar es Salaam, and records the status of the colonies at Zanzibar and Pemba as "undetermined". I have counted more than 300 of these bats flying over Dar es Salaam in southwesterly direction at dusk, but whether they are actually roosting on the mainland or on small islands nearby remains to be see.

K.M. Howell,
Dept. of Zoology,
Box 35064, Dar es Salaam.

REFERENCES:

Mutere, F.A. (1965) The biology of the African Fruit Bat *Eidolon helvum*. Ph.D. Thesis, University of East Africa.

Swynnerton, G.H.S. & Hayman, R.W. (1951) A checklist of the land mammals of the Tanganyika Territory and the Zanzibar Protectorate. *Jl E. Africa nat. Hist. Soc.* 20:274-392.

SILVER BIRD *EMPIDORNIS SEMIPARTITUS* AT KAREN

An opportunity occurred to observe this bird in a Karen garden (Olalua Ridge) on 18th, 19th and 20th March 1973.

The occurrence is of interest because according to Mackworth-Praed & Grant Vol.2 p.187, this bird would appear to be unknown in eastern Kenya. The bird in common with numerous other birds was attracted by an idigenous wild fig, bearing fruit, with attendant insects.

The Silver bird was not particularly shy, and a clear view was obtained each day between about 10 a.m. and 12 noon through binoculars, and also by unaided vision. The bird was not seen to hawk flies, although on several occasions it left the tree to take insects on the ground, returning immediately to a branch of the tree. It seemed more interested in the insects which frequented the ripening fruit, than in the actual fruit. In fact the bird was conspicuous by its lack of activity compared with other birds which were vigorously attacking the fruit; the Silver Bird on the contrary, was sitting on branches rather pensively for long periods, or hopping sedately from branch to branch.

There could be little doubt about the bird's identity which is somewhat unique, the form and colouring corresponding closely to the illustration on Plate 61 of Mackworth-Praed & Grant, the only difference being that the bird under observation had very faint mottling on its chest visible at close quarters. This, and its possibly unusual habitat, suggests that it may have been an immature bird.

It would be interesting to know whether *E. semipartitus*is an unusual occurence in the vicinity of Nairobi.

J.K. Edwards,
Box 42446,
Nairobi.

Since submitting the above note, General Edwards and his wife have examined skins of the Silverbird in the National Museum collection and are sure of their identification. Ed.

NEST RECORD SCHEME - NEW ADDRESS

Firstly I would like to emphasise that the Nest Record Scheme is still very much in existence despite the fact that it has been dormant during my absence from East Africa over the last five months.

Members who still have cards with breeding records for 1972 are kindly asked to send them to the address given below, as soon as possible.

There is a tremendous amount of breeding activity in many parts of East Africa at this time of year, and I know that many members will be finding nests, not only on field trips but even in their own gardens. Please make the very small amount of extra effort involved in filling out nest record cards, and thereby make a useful contribution to the ornithology of our area.

I am always pleased to hear from new members who would like cards or information about the scheme.

Hazel Britton,
Shimo-la-Tewa School,
Box 90163, Mombasa.

- - - - - - - - - - - - - -

APPEAL

The following letter has been received from Mr Hilary Ng'weno, the Chairman of the Kenya Museum Society. Members wishing to support this appeal should make their cheques payable to "Adamson Painting Fund", Kenya Museum Society, Box 40658, Nairobi. Ed.

SAVE THE JOY ADAMSON PAINTINGS

The Joy Adamson original paintings at the National Museum, Nairobi, were commissioned by the Kenya Government. They represent an unique record of the peoples of Kenya and the botanical wealth and beauty of this country.

It has been discovered that the present framing is so inadequate the paintings are already deteriorating. It is imperative to save this unusual collection for the future generations of Kenya.

The Kenya Museum Society has undertaken to reframe all of the 820 paintings for their permanent protection and preservation. This is an enormous undertaking. Time is urgent since the botanical prints have already been put in storage, and the ethnographic prints must be removed immediately. They will not be returned to the galleries until their preservation is insured.

Each painting will cost £5 to reframe. They will be done in lots of 50 as the funds are found. WOULD YOU FRAME ONE PAINTING ?

The donor of each frame will receive a certificate entitling him to choose a 10" X 14" print of one of Mrs Adamson's paintings from the Museum Shop.

If all of the community will help, it will not be long before every one can enyoy these lovely paintings again, and you will have shared in the preservation of this remarkable record of Kenya's heritage.

H.B. Ng'weno, Chairman,
Kenya Museum Society.

- - - - - - - - - - - - - - - -

LETTER TO THE EDITOR

Sir,

Regarding earless rhinos (G. Rilling *antea* p.71) this is apparently not quite as rare as one might be inclined to assume. Goddard (1969) listed 16 cases from seven different areas, known to him either from the literature or from personal observations. In some cases, only one ear was absent, but at least six animals were known to have been born earless, including a then young male (born October 1967) in the Olduvai area. The condition predominantly occurred in males; from this and other evidence, Goddard tentatively concluded that a sex-linked gene might be involved.

I have on various occasions, seen rhino with only one ear in Tsavo National Park. In such cases it is always difficult or impossible to know whether the condition was a congenital defect or a result of an encounter with a predator.

Walter Leuthold,
Tsavo Research Project,
Box 14, Voi.

- - - - - - - - - - - - - - - -

THE ARRANGEMENT OF THE LIBRARY

The Library has been rearranged since I have been working in it, and perhaps it is time now to explain some of the principles of its arrangement. Libraries are faced with a new problem in these days of "open access". In the old days books could be put on the shelves as they arrived, as tight as they would go, or according to size. You looked up the book you wanted in a catalogue, took down the number and a "book boy" would fetch the book for you. Some of these book boys became great librarians. But now, when readers can wander about a library as they like, they expect to find books arranged according to subject, and this is more complicated than you might think, besides using up a great deal more space. A whole section of the Library training programme has to be given up to "Classification" and many students find it difficult.

This Library was roughly classified when I came, and after a time I felt that something more systematic was now needed. For reasons that I need not go into now, it is much better to use an accepted classification than to try to invent one for yourself. The Periodicals were easy; they are best arranged in alphabetical order of the first word of the title - the same order that is used in the famous "World list of Scientific Periodicals". If you cannot make up your mind which is the first word of any individual title, you can consult the World List itself (if one is available, The Library of E.A.A.F.R.O. has kindly lent us a copy of an old edition). This list also contains the standard abbreviations of the titles which authors should use when giving references. For the books, the classification that I have used is the "Dewey Decimal Classification". It is not a good one for a special library like our's, but is very well known, as it used in all public libraries and the British Council were kind enough to lend us a copy on long loan. It would have been no use my planning to use another classification which, though possibly more suitable, was not available. These classifications are very expensive to buy . . . I need say no more.

One of the chief disadvantages of using a general classification in a special library is the length of the notation - the number of numerals or letters that you have to write on the back of a book. I think most people know how "Dewey" works: e.g. 500 covers books on Science, 580 those on Botany, 582 Seed bearing plants, 582.16 Trees (Trees of Kenya is 582.160962). I find it tiresome to write such a screed on the spine of any book, therefore many of our books are not as closely classified as they should be. On the other hand, a book on the selection and purchase of layettes (if we had such a thing) would require but 5 figures (646.36) and one on Marital ethics but 3 (173). This is of course because we only use a very small portion of a classification designed to cover books on all subjects. Practically, we only use sections 500 (Science) and 900 (History and Geography). There are a few books in 400 (Languages), Agriculture and Gardening come in 600 (Useful Arts) and National Parks in 700 (Fine Arts and Recreation). Often with any classification it is difficult to decide where a book should go; for instance, "The Man-eaters of Tsavo" - should it go with books on lions (599.74) or with books on Kenya (967.62) ? My failure to make up my mind has resulted in such glaring inconsistencies as Dale & Greenway's "Kenya Trees and Shrubs" being classified with books on Trees, while Eggeling & Dale's "Indigenous trees of the Uganda Protectorate" is with plants of Uganda.

However it still remains true that it does not matter where you put a book as long as it is properly catalogued, and proper cataloguing involves the making of a classified catalogue with plenty of cross-references. Though the book can only stand in one place, there can be cards or slips in any number of places. You can put "The Man-eaters of Tsavo" in 967.62 and put another card in the classified catalogue under 599.74 referring you to 967.62. So it is as well to use the classified catalogue when you are looking up a particular subject. There is an index as well to help you. The plan is to sort all reprints and pamphlets into boxes labelled on the same system; and the index of articles that I happen to have noticed in Journals will be arranged in the same way. So please use the catalogues - AND IF YOU CANNOT FIND WHAT YOU WANT, PLEASE ASK THE STAFF.

P.M. Allen, Librarian,
Joint Library E.A.N.H.S. & National Museum,
Box 44486, Nairobi.

- - - - - - - - - - - - - - - -

THE SOLAR ECLIPSE OF 30th JUNE 1973

In the afternoon of 30th June 1973 between approximately 15.00h and 17.00h local time, an eclipse of the sun will occur which will be visible throughout Kenya; the eclipse will be total in a band some 250km in width running roughly NW - SE across northern Kenya, outside this band the sun will not be completely obscured: Nairobi and Kitale will have a maximum of 96% obscured, Nanyuki 97%, Nakuru 94%, Malindi 93% and Mombasa 90%.

Apart from physical observations related directly to the eclipse there will be effects on living things which will be well worth noting - "evening singing of birds, flying of bats and of nocturnal insects and the effect on plants.

A word of warning about looking directly at the sun while it is partially eclipsed: this is *extremely* dangerous and can result in blindness. The best way to view it is to make a pin-hole camera and observe the image of the sun on a paper screen. Remember: it is safe to look directly at the eclipse during totality, but if you view it from outside the band of totality take suitable precautions.

Members in Nairobi will have the opportunity to attend a talk by Dr Brock of the Dept. of Physics, University of Nairobi, on Monday 11th June 1973 on "The Solar Eclipse of 30th June 1973".

Ed.

- - - - - - - - - - - - - - -

SOCIETY FUNCTIONS

Monday 11th June 1973 at 5.15 p.m.: at the National Museum Hall, Nairobi. Dr Brock of the Department of Physics, University of Nairobi will talk on "The Solar Eclipse of 30th June".

16th/17th June 1973: Visit to Mountain Lodge, please see May issue *EANHS Bull.* for details.

Monday 9th July 1973 at 5.15 p.m.: at the National Museum Hall, Nairobi. Dr K.R. Bock of E.A.A.F.R.O. will give an illustrated lecture on "Fishes of the Kenya Reef".

Saturday 28th July/Sunday 29th July 1973: Mr and Mrs P. Kenyon will lead a field excursion to the southern end of Lake Magadi. For further details please see next issue.

Wedensday morning bird walks are still being led by Mrs Fleur Ng'weno. Meeting place: National Museum, Nairobi at 8.45 a.m.

- - - - - - - - - - - - - - -

NEW MEMBERS - JUNE 1973

Life member:

Mr Patrick Mackie, Mahee Island, Comber, Belfast.

Full members:

Dr L.R. Cole, E.A.A.F.R.O., Box 30148, Nairobi.
Mr D.L. Elder, Box 30772, Nairobi.
Mr Ben A. Ng'ang'a, Wilderness Trails (K) Ltd., Box 20224, Nairobi.
Mr R.J. Prickett, Box 792, Nyeri, Kenya.
Mr B. Rensberger, Box 30576, Nairobi.
Miss Josephine M. Thompson, Hurlingham Hotel, Box 43158, Nairobi.
Mr F.K. Vollmers, Hapag-Lloyd, 132/6 Robinson Road, Singapore 1.

Junior members:

Miss J.L. Augenbuck, Friends World College, Poste Restante, Machakos, Kenya.
S.J. Bush, Box 14022, Nairobi.

- - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings.

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN JULY 1973

CONTENTS

Collared Flycatcher and Red-footed Falcon in western Kenya - - - - - 94

A record of the Corncrake *Crex crex* from Dar es Salaam - - - - - - - 95

Some recent raptor records from East Africa - - - - - - - - - - - - 96

Some observations on Bustards in Nairobi National Park - - - - - - - 98

An attack by jackals on an adult male Thomson's gazelle - - - - - - 99

A probable Lesser Frigate Bird near Dar es Salaam - - - - - - - - - - 100

Is the Somali Bee-eater extending its range? - - - - - - - - - - - - 101

Ringing News - 102

Rainfall at selected sites in East Africa, Weekly summaries - - - - 103

Letter to the Editor - 103

The Dennis Stanfield Award - 104

Some recent periodic literature available in the library - - - - - - 104

Society Functions and Notices - - - - - - - - - - - - - - - - - - - 105

We do not know whether the second bird seen was a Red-footed Falcon. No other Palaeartic raptors were seen that day, although Steppe Buzzards *Buteo buteo*, *Aquila* eagles and a few Hobbies pass annually over Ng'iya Hill on southward passage, mainly during October.

Both Ng'iya and Lake Kanyaboli in Central Nyanza feature as localities for extra-limital Palaeartic species in Backhurst *et al.* (1973). It is worth noting that the exceptional fall of migrants at Lake Kanyaboli in November 1969, referred to in that paper on p.23, was never repeated in subsequent seasons (1970, 1971, 1972), although less important falls were noted. Thus we did not subsequently record either the Woodchat Shrike *Lanius senator* or the Nubian Shrike *L. nubicus* there. The records of the Woodchat Shrike given in that paper might suggest that its status is comparable to that of the Redstart *Phoenicurus phoenicurus*, but the latter is annual in very small numbers in western Kenya south to the equator, and there is a further record of a male ringed at Ng'iya on 1st December 1971.

The rarer Palaeartic ducks are unaccountably absent from Nyanza yet several are regular as far south as Arusha (Backhurst *et al.* 1973). A fine view of a drake Teal *Anas crecca* at Lake Kanyaboli on 13th March 1971 is our only Kenya record for any of the ducks dealt with in that paper.

Peter L. Britton & Hazel A. Britton,
Shimo-la-Tewa School,
Box 90163, Mombasa,
Kenya.

A RECORD OF THE CORNCRAKE *CREX CREX* FROM DAR ES SALAAM

In their recent paper on the Less Common Palaearctic Migrant Birds of Kenya and Tanzania, Backhurst, Britton & Mann (1973) *Jl E. Africa nat. Hist. Soc. & nat. Mus.* 140, point out that little information is available on the movements of the Corncrake *Crex crex*. They note the following records (sight or specimen) from Tanzania: Sanya (April); Ugalla River Game Reserve (mid February); Iringa (March and early April); the Rukwa (February - mid April); and Lake Manyara (April).

On 29th April 1973, a day on which Dar es Salaam received about 100mm of rain, a male Corncrake was brought to me by a grounds worker at the University. Because the bird's feathers were completely wet, it had been easily captured in the tall grass which surrounds the University's sewage oxidation ponds.

The bird was in breeding plumage and very fat. It had testes of 4 X 2mm. The length of the wing was 147mm, the weight 193.7g. Four Mallophaga of the species *Rallicola ortygemetrae* (Schrank, 1781) were removed from the wing-feathers; these were kindly identified by Dr T. Clay of the British Museum (Natural History). The bird, prepared as a study skin, is catalogued as UDSM-B-39.

This record, if it were to be supported by further sightings or specimens, would lend credence to the idea that many records from Nairobi and the Kenya Highlands reflect the numbers of interested observers there rather than a lack of movement of birds in other areas. Intensive observations and netting effort in areas known to be suitable for crakes along the East African coast might prove rewarding from February to April, the known northerly migration time for these birds. Such observations might tell us if the Corncrake and the Spotted Crake *Porzana porzana* both move regularly at least about the same time in eastern Tanzania and on the coast of East Africa, as might be indicated by the records from Kilosa (14th April) and Zanzibar (no date given) in Backhurst *et al.* (*op. cit.*).

On the following day, while walking at the edge of the oxidation ponds, I saw a Greenshank *Tringa nebularia* which was as wet as had been the Corncrake. The bird was completely soaked to the skin. It was unable to fly and could only run rather poorly in its efforts to avoid capture. After a quick examination, it was released. I did not observe its preen gland, but that of the Corncrake seemed to be functioning normally, judged by the copious quantity of oil which flowed from it. The large pile of detergent foam which was present at various points on the surface of the oxidation ponds, on the outflow stream, and on the surrounding vegetation might have been responsible for destroying the water-repelling quality of the feathers of both birds, if they had come into contact with it. None of the other birds present, including other Greenshank, seemed to have been affected.

K.M. Howell,
Department of Zoology,
Box 35064, University of Dar es Salaam,
Dar es Salaam, Tanzania.

- - - - - - - - - - - - - - -

SOME RECENT RAPTOR RECORDS FROM EAST AFRICA

Accipiter rufiventris Rufous Sparrowhawk

Impenetrable Forest, Uganda: one seen on 9th August 1971 at Ruhizha (2500m). Mann (1971) listed only six records from Uganda, including two from the Impenetrable Forest.

Hieraaetus pennatus Booted Eagle

Ngong Hills, Kenya: excellent views were obtained of a dark phase adult on 21st October 1972. Backhurst, Britton & Mann (1973) had only eight records from Kenya; Rolfe & Pearson (1973) added two more.

Pernis apivorus Honey Buzzard

Kenya: Gedi - one flew over at tree top height on 22nd August 1972.
Mosoriot, near Kapsabet - one flying over main road towards dusk on 11th May 1973.

Tanzania: Ngorongoro Crater - one in forest on rim of crater, mid-December, 1964.

*c.*50km south of Korogwe - one by road, 20th December 1972. Backhurst *et al.* (*op. cit.*) found only five definitive records for Tanzania.

Uganda: Soroti - one on 21st November 1966.
Budongo Forest - three were seen heading north-west sometime in April 1967.

Falco amurensis Eastern Red-footed Falcon

Makerere Hill, Kampala, Uganda: a female perched at about 4m above the ground on a branch of a Blue Gum (*Eucalyptus* sp.) in April 1965. It was extremely tame and could be observed at close quarters. Copious notes were taken at the time, but I can no longer find these. However, I do remember being distinctly certain of the bird's identity, and the record was entered without query into my files. I believe this species has not been recorded in print for Uganda before.

Falco chicquera Red-necked Falcon

In contrast to the situation in Uganda, this would seem to be an extremely uncommon bird in Kenya. I have identified it at and around Malindi in August, and in Meru National Park in January. I have no records from Tanzania.

Falco concolor Sooty Falcon

I found this species widespread in small parties during April 1967 in the Murchison Falls National Park and the Masindi area. I have not observed it before or since in East Africa. As far as I can gather, the species has not been recorded before in Uganda, although it appears on the Uganda list in both Backhurst & Backhurst (1970) and Forbes-Watson (1971). Moreau (1969) gives one record from Lake Victoria (Ukerewe Island, Tanzania) but nothing more westerly in East Africa. Brown & Amadon (1968) suggest that it might follow the Nile and Rift Valley in its migrations from the breeding grounds in northeast Africa to the wintering grounds in East Africa and Madagascar.

Although I had not seen the species for almost five years (I spent some time studying them on their breeding grounds on the Dahlac Islands off the Red Sea coast of Ethiopia in 1962) I had no hesitation in identifying them as this species on plumage and 'jizz'. They are quite different from the Grey Kestrel *F. ardosiacus*, another species with which I am very familiar, although they resemble each other in plumage. This latter species, common in Uganda, normally occurs in pairs, is shorter winged, plumper and a much more sluggish bird with different feeding habits. The leg colour is also different; in *concolor* it is orange while in *ardosiacus* it is yellow.
I do not know Eleonara's Falcon *F. eleonorae* but this is a much larger bird and even less likely to occur in Uganda.

Falco fasciinucha Taita Falcon

Kabarnet, Kenya: an adult in mid-March 1970.
Lake Magadi, Kenya: 4 birds (2 adults) flying around a crag a few kilometres north of the lake on the Olorgesailie road on 19th March 1970.

The Kabarnet bird and the two I judged to be adults at Lake Magadi (the other two were not clearly seen) were characterised by their rather plump appearance, with the shape in flight of a very small Peregrine *F. peregrinus*.

The upperparts were dark grey to blackish contrasting with a conspicuously pale grey rump; some chestnut on head, moustachial stripe black. Underparts varied from whitish on chin through various shades of tawny, becoming darkest around the vent. No markings could be seen on the underside. On size, 'jizz' and plumage I was able to eliminate all other East African falcons. This rare species is previously only recorded in Kenya from Malindi, the Taita Hills and Voi.

Clive F. Mann,
Box 337, Kapsabet,
Kenya.

REFERENCES:

Backhurst, G.C. & Backhurst, D.E.G. (1970) A Preliminary Checklist of East African Birds. Kabete, Nairobi: duplicated.

Backhurst, G.C., Britton, P.L. & Mann, C.F. (1973) The less common Palaearctic migrant birds of Kenya and Tanzania. *Jl E. Africa nat. Hist. Soc. & nat. Mus.* 140:1-38.

Brown, L.H. & Amadon, D. (1968) *Eagles, Hawks & Falcons of the World.* 2 vols. Feltham: Hamlyn for Country Life Books.

Forbes-Watson, A.D. (1971) Skeleton Checklist of East African Birds. Nairobi: duplicated.

Mann, C.F. (1971) Distributional notes on some Uganda Birds. *Bull. Br. Orn. Club.* 91:111-113.

Moreau, R.E. (1969) The Sooty Falcon *Falco concolor* Temminck. *Bull. Br. Orn. Club.* 89(3):62-67.

Rolfe, J.G. & Pearson, D.J. (1973) Some recent records of Palaearctic migrants from eastern Uganda. *EANHS Bull.* 1973:62-66.

SOME OBSERVATIONS ON BUSTARDS IN NAIROBI NATIONAL PARK

On the morning of 17th February 1973 which was rather dreary and overcast with occasional drizzle, I encountered a female Hartlaub's Bustard *Eupodotis hartlaubi*, accompanied by two small downy young. After moving a short distance from my Land Rover, the mother Bustard squatted down, calling the chicks to her. They pushed their way up to her back where they were brooded between the wings in a similar way to that used by grebes (Podicipitidae). While brooding, the female retracted and folded her neck so that it gave the odd appearance of emerging from the middle of her back. After about 15 minutes, when she stood up, one of the chicks remained clinging to her back and was carried in this position for some 20m before falling off into the grass.

Mackworth-Praed & Grant record most East African bustards as eating "suitable vegetable food", but make no specific reference to flowers. On 10th March 1973, I saw an adult male White-bellied Bustard *E. senegalensis* eating all the flowers from several "Waste Paper Plants" *Rhamphicarpa heuglini* Schweinfurth (*R. montana* N.E. Br ia a synonym), a common, prostrate member of the Scrophulariaceae.

The same authors record a Kori Bustard *Otis kori* nesting in Kenya between May and August. On 10th March 1973, I saw a pair accompanied by a partly feathered chick, estimated to be between two and three weeks old, that was about the size of a Yellow-necked Spurfowl *Francolinus leucoscepus*. The baby was being fed on large grasshoppers by the female. When on the move, the baby walked under its mother's belly, immediately behind her legs. This position was still being used by a larger baby, possibly the same one, seen about a month later. A fully feathered but diminutive juvenile, about the size of a female Hartlaub's Bustard, seen in early May, was still being given food by its mother although it was also feeding itself.

J.F. Reynolds,
Box 40584,
Nairobi.

- - - - - - - - - - - - - - -

AN ATTACK BY JACKALS ON AN ADULT MALE THOMSON'S GAZELLE

A number of knowledgable people have expressed surprise that jackals could kill an adult Thomson's gazelle. Moreover, there are *suggestions* in the literature that jackals do not kill animals that large. For example, Louis S.B. Leakey writes "...... they move about in unison looking for remains of a cheetah kill, or gazelle fawns that they can bring down easily .... All jackals will take small game, as well as rodents, lizards, birds eggs, and some wild fruit." (*Animals of East Africa*, The National Geographic Society, 1969, p.74). In *Serengeti, Kingdom of Predators*, p.25, George B. Schaller writes, "At other times they must hunt for themselves, anything from beetles, lizards, and mice to Thomson's gazelle fawns". The only suggestion I have seen that jackals can kill larger animals is an ambiguous sentence in *A Field guide to the Larger Mammals of Africa* by Dorst & Dandelot, ".... it also kills young and small antelope up to the size of a duiker or Thomson's gazelle, especially dik-dik." For these reasons I thought it worthwhile to record the event described below, which I recorded on super-8 cine film.

On a morning in early November 1972 I spotted some black-backed jackals *Canis mesomelas* in Nairobi National Park near post 4A. About 100m further on was a lone adult male Thomson's gazelle *Gazella thomsonii*. Because of the proximity of the jackals, I stopped to watch. The gazelle wandered about, nibbling occasionally, and at about 0800h sat down in some grass in which he was fairly well hidden, though his large horns rose well above the grass. He sat motionless as a jackal trotted briskly by about 20m away. When about 40m from the gazelle, the jackal hesitated and turned toward the gazelle, which he had not yet seen. When the jackal was 12-15m away, the gazelle jumped to its feet and stood facing the jackal, which saw the gazelle for the first time. The jackal trotted towards the gazelle, which made no attempt to flee but instead charged the jackal as he tried to circle the gazelle. The jackal then crouched in front of the gazelle, head to the ground and tail wagging in the air like a playful puppy, and nimbly jumped aside as the gazelle charged.

Within about 10s of the first encounter another jackal appeared, and within 20s some 10-15 jackals appeared from many directions. One jackal then pressed the attack. He attempted to circle the gazelle closely in an effort to nip at the tail or anal region. The gazelle would turn and try to butt the jackal, and so a "merry-go-round" ensued. For a few seconds another jackal attempted to enter the fray, but this did not last. At one time a jackal succeeded in getting a hold on the gazelle's hind-quarters, but the gazelle spun and flung him off. After about five minutes of these gyrations the gazelle seemed to tire. Two more jackals now joined the attack. One toyed with the gazelle in front but made no attempt to nip. The second joined the other jackal at the rear. The gazelle whirled, dislodging the two jackals at his rear, which was immediately set upon by another jackal. Now several jackals had hold of the gazelle's hind quarters, and he dropped to the ground on his side his head upright. Jackals swarmed all over the gazelle but avoided his head. After about half a minute the gazelle struggled to his feet and walked away, momentarily dragging one jackal. The gazelle was now very tired and seemed in shock. One jackal almost pulled him down with a tug on the tail. One or two other jackals continued to pull at his hind quarters, and soon the gazelle went down again. This time his head was on the ground, three or four jackals attacked his hind quarters, and it was clear that the gazelle was dead or nearly so.

At that time a Park's Land Rover drove up, and the jackals ran as some rangers walked over to the gazelle. I joined them, and we found that the gazelle had been partially disemboweled through a tear 30cm long running from his anus forward.

Throughout the above encounter the gazelle made no attempt to flee. What could be the reason for this? Do gazelles flee from jackals at other times, or are they generally unconcerned unless young are present? And are there any other accounts of a similar attack?

Charles A. Sleicher,
5002 Harold Place N.E.,
Seattle, Washington 98105,
U.S.A.

A PROBABLE LESSER FRIGATE BIRD *FREGATA ARIEL*

NEAR DAR ES SALAAM

On 3rd June 1973 while swimming at high tide about 30m off Ras Kiomboni 25km north of central Dar es Salaam, a Frigate Bird flew slowly over my head and in a desultory fashion continued southwards following the coastline.

Not surprisingly I did not have binoculars with me and I did not have time to return to the shore to get them. However, I had a reasonable view of the bird, particularly its underparts, and noted the following points.

It appeared smaller and scraggier than the probable Great Frigate Bird *Fregata minor* that I saw over Dar es Salaam in June 1972 (*EANHS Bull.* 1972:

140). Its mantle, wings (including the undersides), lower belly and under tail coverts and tail appeared dark blackish brown. Its head was whitish with light brownish markings particularly on the crown and hindneck. The underparts from chin to belly were white apart from an almost complete blackish pectoral band. The bill was very pale.

Its general appearance suggested that it had been storm blown. It did not have the easy flight control of last year's bird and frequently fanned its tail into a wide fork.

The presence of a distinct pectoral band suggests that this bird was probably an immature Lesser Frigate Bird *Fregata ariel.*

W.G. Harvey,
Box 9100,
Dar es Salaam.

IS THE SOMALI BEE - EATER EXTENDING ITS RANGE?

In an earlier note (*EANHS Bull.* 1971:97) I commented on some observations of the Somali Bee-eater *Merops revoilii* in Tsavo East National Park and suggested tentatively that the species occurred here only seasonally. However, then I had only seven sight records, between October and May, whereas now I have 26 records, spread fairly evenly throughout the year. When looking at the temporal and spatial distribution of these sightings, the following points emerge: As far as individual years are concerned, I have three records in 1970, eight in 1971, eleven in 1972 and three, so far, for 1973 (for only 2½ months field work), plus one in 1968, from an isolated visit. The spatial distribution is as follows: While by mid-1971 I had only seen the species near the Galana River (cf. my earlier note), sighting farther and farther to the south of it are becoming more common. The southernmost observations to-date were over 25km south of the Galana River, viz. at 3.17'S. (three records between 17.8.72 and 20.4.73).

These changes in frequency and distribution of observations may be more apparent than real, as a result of differing schedules of visits to different areas, and also of increasing awareness and familiarity with the species. All of these factors are difficult to check. However, I have the subjective impression that the Somali Bee-eater has become somewhat more numerous over the last three years and I suspect that an extension of the species' range may be taking place. A possible reason for this could be the prolonged dry period that we have gone through and are, in fact, still experiencing. I would be interested to hear if similar observations have been made elsewhere. Meanwhile, I am waiting for the first sighting south of the Voi River!

I do not know whether the species breeds in the Park. All sightings were of one or two birds only.

Walter Leuthold,
Tsavo Research Project,
Box 14, Voi.
Kenya.

RINGING NEWS

1. Shortly after you receive this *Bulletin* the ringing year will have finished. Please send in all your completed and partially completed schedules early in July (1973!).

2. New schedules have been printed and I hope that ringers will find them an improvement over previous types. The differences are as follows:

   1. There is more room for the species name.
   2. The 'age' and 'sex' columns are combined.
   3. The 'date' and 'locality' columns are wider.
   4. The full ring number has to be written less often.
   5. The printed numbers on the second side are in correct numerical order!

   It would be a great help to me if ringers would please use the following conventions when filling in schedules (some of these instructions are printed at the top of the schedule):

   1. Write out the generic name in full on first mention.
   2. Always write the whole date in the form '10.4.73' i.e. 10th April 1973.
   3. The 'year' (top line) should always contain two calendar years i.e.1973/4.
   4. Where the locality is likely to be difficult to locate please give more details in the 'Space for other notes' or 'Other data' column. Please, when filling in the locality name, imagine the bird being recovered, maybe in some years' time after you have left East Africa. The ringing organizer will have to prepare a recovery form which requires co-ordinates, so please be as accurate as possible.
   5. Use of the Palaearctic age code (= the EURING code) is at present optional; you will note that it attempts to *age* the bird with respect to its date of hatching. In this code the calendar year is all important. Examples of use of the code are as follows:

      a. A 'first winter' bird caught between August and 31st December will be '3'.
      b. The same bird caught between 1st January and (say) May 1974 will be '5'.
      c. An 'FG' Palaearctic bird (i.e. age quite unknown) will be '2' from July to 31st December but will move up to '4' on 1st January.
      d. The system used in the past (and still advocated for Ethiopian species) is a mixture between aging and plumage state; so when a ringer writes 'A' (= adult) he is not attempting to age the bird, he is merely stating that it is in adult plumage. 'Pull.', 'juv.' and 'imm.' imply that the bird was hatched in the comparatively recent past.

3. The ringing report for 1971-72 is in galley proof and should be sent out to all members fairly soon.

4. Most returns are in for the 1972-73 year: it appears that, overall, fewer birds will have been ringed compared with recent years although many individual species totals are higher than ever before. Many of the less common Palaearctic warblers and thrushes have greatly increased totals; most wader totals are down except for Little Stint *Calidris minuta* (2000+),

Curlew Sandpiper *C. ferruginea* (370+) and Greenshank *Tringa nebularia* (50+).

Graeme Backhurst,
Ringing Organizer,
Box 29003, Kabete.

- - - - - - - - - - - - - - -

RAINFALL AT SELECTED STATIONS IN EAST AFRICA

WEEKLY SUMMARIES

The East African Meteorological Department, Dagoretti Corner has most kindly agreed to send the E.A. Herbarium these weekly rainfall records starting with those for the week ended 30th May 1973. These will be kept in a file in the Herbarium library. Members of the E.A.N.H.S. and other visitors to the Museum library are welcome to consult them. The amount of rainfall for the week in 47 stations in Kenya, 33 in Tanzania and 19 in Uganda is (if every one sends in data) supplied. The current list gives returns for 30 stations in Kenya, 24 in Tanzania and 14 in Uganda. In the drier parts of E. Africa the success or failure of a botanical or zoological safari may depend very largely on the rainfall during the preceding weeks and it is thought that those planning such safaris may find it useful to consult these records.

Records for all places in Kenya where rainfall is measured are compiled at the Kenya Regional Headquarters of the E.A. Meteorological Department in the Community Buildings Ngong Road, Nairobi. Information about recent rainfall at places in Kenya other than those on the list mentioned above may be obtained by a visit to their office.

J.B. Gillett,
East African Herbarium,
Box 45166, Nairobi.

- - - - - - - - - - - - - - -

LETTER TO THE EDITOR

Sir,

STRAW COLOURED FRUIT BAT *EIDOLON HELVUM* IN DAR ES SALAAM

I was interested in K.M. Howell's recent note (*EANHS Bull.* 1973:86-87). Although I have never been able to confirm my sight identification, what I have always taken to be this species of bat occurs in quite large numbers in Dar es Salaam. One place where there is at times a roost of at least 1000 is the coconut plantation between Msasani village and the Drive In Cinema. On several occasions I have seen numbers of these large bats flying low over the palms when they have been disturbed in daylight. More regularly I have seen them at dusk, flighting high in the sky north west over the Drive In Cinema and the Msasani salt flats. It is interesting that this is an area where the Bat Hawk *Macheirhamphus alcinus* is regularly seen although one would think that this particular species of bat was too large even for a bat hawk's capacious gullet.

I think there is probably another roost either in the city or to the south of it as I have seen dusk flights over the city, particularly moving north west over Kariakoo and Magomeni.

W.G. Harvey,
Box 9100,
Dar es Salaam.

- - - - - - - - - - - - - - -

THE DENNIS STANFIELD AWARD

The Dennis Stanfield Memorial Fund has been established to assist persons of scientific merit to undertake botanical research on tropical African plants. The first award of £100 will be made in June 1974. Applications should reach the Executive Secretary of the Linnean Society of London, Burlington House, Piccadilly, London WIV OLQ by 31st March 1974.

The award is to be used for such items as travel, equipment, books, computing time, research expenses and the like, in connexion with any aspect of botanical research. The award is open both to amateurs and professionals; preference will be given to work relevant to West Africa.

Applicants should state full name, address, age, present position, relevant qualifications and publications and the names and addresses of two referees. They should also give a brief statement of the proposed research and the purpose for which the award would be used, and should refer to any similar applications made elsewhere.

- - - - - - - - - - - - - - -

SOME RECENT PERIODIC LITERATURE AVAILABLE IN THE LIBRARY

Cornell University. 1972 African sounds added to the Library. Newsletter to members. No.66. p.2.

Hanks & McIntosh. 1973. Population dynamics of the African Elephant *Loxodonta africana*. *J. Zool.* 169:29.

International Union for the Conservation of Nature - Ecological study of Empakaai Crater started in Tanzania. *Bull. IUCN N.S.* 4:2.

Jenkins, F.A. 1970. Anatomy and function of expanded ribs in certain edentates and primates. *J.Mammal.* 51:288.

Lewis, Mutinga & Ashford 1972. *hlebotomus longipes* Parrot & Martin (Diptera: Phlebotomidae) and a new related species. *J.Ent.(B).* 41:119.

Owen, J.S. 1973. The Lamai wedge in the Serengeti National Park. *Bull. IUCN, N.S.* 4:3

Smiles, K.H. 1972. A revision of the genus *Naroma* (Lepidoptera: Lymantridae). *J.Ent. (B).* 41:163.

Tinsley, R.C. 1973. Studies on the ecology and systematics of a new species of clawed toad, the genus *Xenopus*, from western Uganda. *J.Zool.* 169:1.

Van Someren, V.G.L. 1972. Revisional notes on African *Charaxes* (Lepidoptera: Nynphalidae) Pt.8. *Bull.Brit.Mus.Entom.* 27:217.
Vesey-Fitzgerald, D. 1973. The dynamic aspects of the secondary vegetation in Arusha National Park. *E.Afr.Agric.For.J.* 38:314.

- - - - - - - - - - - - - - -

SOCIETY FUNCTIONS

Monday 9th July1973 at 5.15 p.m.: at the National Museum Hall, Nairobi. Dr K.R. Bock of E.A.A.F.R.O. will give an illustrated lecture on "Fishes of the Kenya Reef".

Saturday 28th/Sunday 29th July 1973: Mr and Mrs P. Kenyon will lead a field excursion to the southern end of Lake Magadi. Members should be self contained with all camping equipment, water, food and petrol for about 300km. (Petrol is not always available at Magadi). Camp will be at an altitude of about 650m (about 2000ft) and conditions are hot on stony ground. Malaria precautions should be taken. Members wishing to take part should fill in the enclosed slip and return it to Mr P. Kenyon, Box 19163, Nairobi, not later than 14th July. The number will be restricted to 17 cars and further directions will be sent to those taking part.

Monday 13th August 1973 at 5.15 p.m.: at the National Museum Hall, Nairobi. Mr E.R. Robson will give an illustrated lecture on "East African Shells".

Saturday11th/Sunday 12th August 1973: Weekend excursion to the Selengai Area. Details in next issue.

Monday 10th September 1973 at 5.15p.m.: Mr J.F. Reynolds will give an illustrated lecture on "Birds Far and Near".

- - - - - - - - - - - - - - -

NEW MEMBERS - JULY 1973

Full members:

Dr Beryl Dennis, Dept. of Pathology, University of Nairobi, Box 30588, Nairobi.
Mr & Mrs S.D. Hartley, Turkana Irrigation Project, Box 1563 Nakuru.
Mr & Mrs George Preston, Box 21342, Nairobi.

- - - - - - - - - - - - - - -

With this we are enclosing a copy of our folder and form of application for membership. You are reminded that new members can join the Society for sh.25/- during the last half of the year. Perhaps you can think of someone who would like to join, even if you do not, please put this folder up on a notice board in your office, club or school. We should like everyone in the country to at least have *heard* of the East Africa Natural History Society.

Hon. Secretary,
Box 44486, Nairobi.

- - - - - - - - - - - - - - -

LIBRARY NOTES

NEW BOOKS - GIFTS

Alston, Madelaine - *Wanderings of a bird-lover in Africa.* London: Witherby, 1937.

Beaton, K. de P. - *A warden's dairy.* Nairobi: East African Standard, 1949.

Clark, J.D. & Cole, S. (eds.) *Third pan-African congress on Prehistory.* London: Chatto & Windus, 1957.

Colman, J.S. *The sea and its mysteries.* London: Bell, 1950.

Curry-Lindhahl, K. *Let them live: a worldwide survey of animals threatened with extinction.* New York: Morrow, 1972.

Duckham, A.N. & Masefield, G.B. *Farming systems of the world.* London: Chatto & Windus, 1970.

Guenther, K. *A naturalist in Brazil: the flora and fauna and the peoples of Brazil. . .* trans. by Bernard Miall. London: Allen & Unwin, 1931.

Scheinfeld, A. *Heredity in humans.* London: Chatto & Windus, 1972.

Stebbing, E.P. *Stalks in the Himalaya: jottings of a sportsman-naturalist.* London: John Lane, 1912.

Stockley, C.H. *African camera hunts.* London: Country Life, 1948.

Stuart, Lord David *An illustrated history of belted cattle.* London: Scottish Acedemic Press, 1970.

Taylor, A.W. *Wild flowers of the Pyrenees.* London: Chatto & windus, 1971.

Vevers, G. *The underwater world.* London: Chatto & Windus, 1971.

Wallis, J.P.R. (ed.) *The Zambezi expedition of David Livingstone, 1858-1863.* 2 vols. London: Chatto & Windus, 1956.

NEW BOOKS - PURCHASED BY THE SOCIETY

Leakey, M.D. *Olduvai Gorge. Vol. 3 Excavations in beds 1 & 11, 1960 - 1963.* Cambridge University Press, 1971.

NEW BOOKS - FOR REVIEW

Fryer, G & Iles, T.D. *The Cichlid fishes of the great lakes of Africa: their biology and evolution.* Edinburgh, Oliver & Boyd, 1972.
Graham, A.D. *The gardeners of Eden.* London: Allen & Unwin, 1973.
Kenya, Republic of *Kenya's national report to the U.N. on the human environment.* Nairobi, 1972.
Osmaston, H.A. & Pasteur, D. *Guide to the Ruwenzori, the Mountains of the Moon.* Mountain Club of Uganda, 1972.
Wigglesworth, V.B. *The principles of insect physiology.* 7th ed. English Language Book Society & Chapman & Hall, 1972.

- - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings.

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

CONTENTS

An introduction to the Natural History of Mwanza Gulf, Smith Sound and adjacent areas, Tanzania - 3 Life in the Lake - - - - - - - 108

Ringing News - 110

Less common Palaearctic migrants - - - - - - - - - - - - - - - - - - 111

Corncrake at Kabete 1946 - 112

Some bird records from Meru and Nairobi National Parks - - - - - - - - 112

Scarce Palaearctic migrants in Kenya - - - - - - - - - - - - - - - - - 113

The Madagascar Pratincole in Tanzania - - - - - - - - - - - - - - - - - 115

Hedgehogs in Tanzania - 116

Nest Record Scheme - New Address - - - - - - - - - - - - - - - - - - 116

Reviews - 117

Correction - 117

Request for information - 118

Society Functions - 118

Solar Eclipse observations - 119

Some recent periodic literature available in the Library - - - - - - - 119

New Members - 120

Numbers of Palaearctic waders in East Africa - - - - - - - - - - - - - 120

AN INTRODUCTION TO THE NATURAL HISTORY OF MWANZA GULF, SMITH SOUND AND ADJACENT AREAS, TANZANIA

3. Life in the Lake*

FISH

In common with other great lakes of east and central Africa, Lake Victoria contains a large number of fish species, 208 at present being known to occur. Of these, 86.5% are cichlids, among which the most economically important are the two indigenous species of *Tilapia*, *T. esculenta* and *T. variabilis*, which support quite extensive fisheries of more than 10,000 tons per annum in Tanzanian waters (Bailey, 1969). However, most of the cichlid species are rather small fishes belonging to the genus *Haplochromis*. This genus has evolved at an explosive rate in Lake Victoria, developing a great multitude of species (Beadle, 1962) and these apparently form the greater part of the fish biomass in the lake.

The most advantageous method of exploiting the large *Haplochromis* population of Lake Victoria has been the subject of considerable controversy (Anderson, 1961). One view favoured the introduction of a vigorous and economically valuable predator which would both subsist on and control the *Haplochromis* population and also possibly cull out some of the smaller *Tilapia*. To this end, the Nile Perch *Lates nilotica* was introduced into the lake near Jinja about 10 years ago and within the last two years has appeared in Mwanza waters, about a dozen having been captured during this time by fisheries biologists based at the Freshwater Fisheries Institute at Nyegezi. However, much of the work at this Institute is concerned with the direct utilization of the *Haplochromis* population as a source of fish meal and, with other species suitably processed, in fish sausages and other fish preparations.

Catfish, *Clarias* spp., and the Lungfish *Protopterus aethiopicus* are commonly sold in the local markets along with *Tilapia* and other species, both fresh and dried. The Lungfish is not only found in the lake but also in small and often temporary dams and ponds. It is able to survive quite severe (but relatively short) dry periods by its habit of burying itself in a burrow, the entrance to which is sealed. In Lake Victoria it is thought to be a relict species, having survived the one or more occasions in recent geological history when the lake is thought to have almost dried up and thereby destroyed the original nilotic fish fauna.

SOME INVERTEBRATES

Besides the Lungfish, the small dams and ponds of Usukuma also frequently contain the Freshwater Mussel (possibly *Spatha wahlbergi*) a fairly large bivalve growing to about 10 X 5 cm. These molluscs are much liked by Open-bill Storks *Anastomus lamelligerus* and the water's edge is frequently littered with their shells after the storks have finished feeding.

---

* Part 1 appeared in the January 1972 issue of the *Bulletin* with a map of the area on p.4, and Part 2 in the issue of June 1973 pp.78 - 81.

Among the the conspicuous features of interest often observed by travellers on Lake Victoria are the dense clouds of Lake Flies which appear, at a distance, like columns of dark smoke arising from the surface of the water. These small midges (mainly *Chaoborus edulis*, Culicidae, but also including some species of Chironomids) seem to be rather more abundant in northern and western areas of Lake Victoria than in the south-east. The larvae exist in enormous numbers on the muddy lake floor and *Chaoborus* larvae are probably the most abundant aquatic insects in this area. *Chaoborus* larvae migrate vertically at night and thus escape the attentions of the elephant-snout fish (*Mormyrus kannume* in particular) which feed on the lake bottom nocturnally and for which the more sedentary Chironomid larvae form a large part of their diet (MacDonald, 1956). The Lake Flies have an interesting cyclical pattern of emergence, apparently being most abundant 2 - 5 days before a new moon (Corbet, 1958).

Schistosomiasis (Bilharzia) is an important endemic disease among the littoral human population, but in this area neither domesticated nor wild animals appear to be an important reservoir of infection (McCulloch & Eyakuze, 1972). In rural areas over 60% of the population can be infected with the urinary form (*Schistosoma haematobium*) and the principle snail host (*Bulinus nasutus*) is ubiquitous in even temporarily wet habitats. In Mwanza town, however, the intestinal form of the disease (*S. mansoni*) is more prevalent (over 30% of the sampled population) the snail hosts being *Biomphalaria pfeifferi*, *B. sudanica tanganyicensis* and *B. choanomphala*, of which the latter is only found in the lake. The risk of infection is greatest at places where people frequently use water, but in sparsely populated areas and in the lake well away from the shore, the risk is slight as the infectious *Cercaria* stage of the protozoan pathogen is short-lived.

D.L. Ebbels,
Ukiriguru, Box 1433,
Mwanza, Tanzania.

REFERENCES:

Anderson, A.M. (1961) Further observations concerning the introduction of Nile Perch into Lake Victoria. *E. Afr. agric. for. J.* 26:194-202.

Bailey, R.G. (1968) Fishes of the genus *Tilapia* (Cichlidae) in Tanzania, with a key for their identification. *E. Afr. agric. for. J.* 34:194-202.

Beadle, L.C. (1962) The evolution of species in the lakes of East Africa. *Uganda J.* 26:44-45.

Corbet, P.S. (1958) Lunar periodicity of aquatic insects in Lake Victoria. *Nature, London.* 330:331.

McCulloch, F.S. & Eyakuze, V.M. (1972) An introductory account of the WHO/Tanzania Schistosomiasis pilot control and training project in Mwanza District, Tanzania. East African Institute for Medical Research, Mwanza.

- - - - - - - - - - - - - - - -

RINGING NEWS

Three interesting recoveries have been reported recently:

Calidris minuta Little Stint			
J.69424	f.g.	13.4.72	Ferguson's Gulf, L. Rudolf. P.L. Britton.
	v	12.5.73	South end of L. Magadi. 610 km S. D.J. Pearson.
Philomachus pugnax Ruff			
B.5649	Ad. ♀	12.4.69	Lake Nakuru, Kenya. E.D. Steel.
	+	16.2.73	*near* Meerut, Uttar Pradesh, INDIA, *c.* 29.00'N., 77.42'E. 5490 km. Syed Mohammad Atiq.
Motacilla flava lutea Eastern Yellow Wagtail			
X.5578	Ad. ♂	25.10.72	Kariobangi, Nairobi. D.J.Pearson.
	+	(?. 5.73)	Taif, SAUDI ARABIA, 21.15'N.,40.21'E. 2530 km. Gaman Attia.

(The distances given are the Great Circle distances between the ringing site and the recovery site, rounded to the nearest 10 km; the birds did not necessarily follow these Great Circle tracks.)

All of the above are of more than normal interest: the Little Stint was some 600 km south of its ringing place when it was caught at Lake Magadi, and a month later (in the next year). Why was it a month and 600 km 'behind' in 1973 ? The distance involved is probably not significant since 600 km could surely be covered in less than a day by a migrating stint, but it is still interesting to speculate why it was a month later going north.

The Ruff to Uttar Pradesh is especially interesting: many Ruff (and other waders) are retrapped in subsequent seasons at their original ringing sites in Kenya proving that they either spend the winter at these sites or pass through each year on the same course to wintering areas further south. This particular Ruff was ringed on its northward spring migration in 1969 at Lake Nakuru, yet in 1973 it was shot in mid February in northern India, strongly suggesting that it either left Africa *very* early in 1973 (the main passage of Ruff through central Kenya is in April and May), or that it stayed in Asia for the last winter. Also of great interest is the fact that Dr David Steel, the ringer of this bird, ringed 295 Palaearctic migrants with 4.3 mm ('B') rings during his years in Kenya: so far, from these 295, he has had two Wood Sandpipers *Tringa glareola* recovered in the U.S.S.R.; a Ruff to near Yakatsk (the scheme's most easterly recovery) and this latest Ruff to India (the scheme's first to the sub-Continent). Not a bad recovery rate, one for every 74 birds ringed (so far). Applying this rate to the 4199 Ruff ringed in E.A. would give 56 recoveries (real number 8) and to the 805 Wood Sandpipers, nearly 11 (real number 3)

The Yellow Wagtail to Saudi Arabia is only the second recovery to that country (the first was a Reed Warbler *Acrocephalus scirpaceus*). The 16 other recoveries of this species have been as follows: one to Qatar, one to Iran, and 14 to the U.S.S.R., an overall rate of one for every 1803 Yellow Wagtails ringed.

Graeme Backhurst,
Ringing Organizer,
Box 29003, Kabete.

- - - - - - - - - - - - - - - -

LESS COMMON PALAEARCTIC MIGRANTS

The recent publication on the above subject by Backhurst, Britton & Mann (1973) prompts me to communicate the following observations from Tsavo East National Park, which were either not submitted to the authors mentioned or were made after the period covered by them. Some of them complement and/or substantiate the conclusions of Backhurst *et al.*

Wigeon *Anas penelope*

7/8.1.1970 one female at Kanderi: 8.1.1970 one male 30.12.72 and 3.1.73 one female all at Aruba Dam.

Eastern Red-footed Falcon *Falco amurensis*

My observation of 5th April 1971 quoted by Backhurst *et al.* is incorrectly reported: the parenthesis shoud read "at least 2 males". Another observation, of a single male, was made on 11th April 1973 near Park HQ.

Spotted Redshank *Tringa erythropus*

Backhurst *et al.* comment on the almost complete absence of records for October and November. Last year, I made the following sightings at Aruba: 3.10.72 (number not recorded, probably one); 2 and 5.11.72 one, and 20.11.72 two. On 4.5.73 two at Aruba, and one was still there (16 and 17.5.73), then in partial breeding plumage.

White-throated Robin *Irania gutturalis*

During the last three spring seasons, I have seen this bird more or less regularly in late March and early April. Exact dates are as follows: 1971. 30.3. one male, 5 and 7.4. one female, 8.4. one (sex not recorded); 1972. 15.3. one male, 19.3. one male, 2.4. one (probably female), 7/8/9.4. one female (probably the same bird); 1973. 20.1. one male, 12.4. one male.

Except for the January record, these all appear to be passage migrants on the return trip. All but two observations were made in gardens; this raises the question as to whether the species has simply been overlooked earlier or whether it has, for some reason, become more common in this area. At any rate, the observations bear out the expectations expressed by Backhurst *et al.* (*loc.cit.*, p.28) that "it is likely that more records of *Irania* will come to light in the future from eastern Kenya."

Walter Leuthold,
Tsavo Research Project,
Box 14, Voi, Kenya.

REFERENCES:

Backhurst, G.C., Britton, P.L., & Mann, C.F. (1973). The less common palaearctic migrant birds of Kenya and Tanzania. *Jl E.Afr.nat.Hist.Soc & Nat.Mus.* No.141:1-38.

CORNCRAKE AT KABETE IN 1946

An additional record of *Crex crex* not given by Backhurst, Britton & Mann (1973) is as follows (taken from my notebook): "18th April 1946. Live specimen found in one of the laboratories of the Veterinary Research Laboratory.(Kabete) after lunch. Taken care of by Bill Langridge and later released".

J.R. Hudson,
"Aberfeldie", Peckon's Hill,
Ludwell, Shaftesbury,
Dorset, England.

REFERENCE:

Backhurst, G.C., Britton, P.L., & Mann, C.F. (1973) The less common palaearctic migrant birds of Kenya and Tanzania. *Jl E.Afr.nat.Hist.Soc. & Nat.Mus.* No.141:1-38.

SOME BIRD RECORDS FROM MERU AND NAIROBI NATIONAL PARKS

MERU

Williams (1967) writes of the Fishing Owl *Scotopelia peli* "Not yet recorded, but probably occurs along the Tana and Rojerwero Rivers". On 21st April 1973, I had a brief view of a Fishing Owl landing on a tall tree near Elsa's Camp on the Ura River. It was mobbed for several minutes by Drongos *Dicrurus adsimilis* and then flew away out of sight. The large size, lax plumage, colouration and habitat preclude confusion with any other African owls.

NAIROBI

During the last year I have recorded the following species not listed by Williams. As none of the Ethiopian species is unexpected no details are given for these:

Darter *Anhinga rufa*; Teal *Anas crecca*: 2 drakes on Vulture Pool (near point 7) on 16th January 1973, 3 drakes and a duck on 20th January, the last record was a drake on 24th February; White-faced Tree-Duck *Dendrocygna viduata*; Crested Francolin *Francolinus sephaena*; Kaffir Rail *Rallus caerulescens*; African Citril *Serinus citrinelloides*; Fan-tailed Warbler *Schoenicola platyura*; Spotted Morning Warbler *Cichladusa guttata*; Yellow-crowned Bishop *Euplectes afer*.

The following less common species were also recorded: Open-bill Stork *Anastomus lamelligerus*: a juvenile at or near Karen Primary School Dam between 24th March and 7th April 1973. Black Stork *Ciconia nigra*: one at the dam north of Point 9 on 14th October, 3 at Bend Donga Dam on 1st April 1973. Osprey *Pandion haliaetus*: one at Narogomon Dam on 21st October 1972 and 11th November 1972. Pratincole *Glareola pratincola*: one at Vulture Pool on 10th May 1973. Spotted Redshank *Tringa erythropus*: two were 'based' on Vulture Pool between 6th December 1972 and 17th March 1973. On 25th February 1973, in addition to these, there were 3 at Bend Donga and one on a flooded salt lick. On 18th March there was one at Bend Donga but none at Vulture Pool where one bird was seen on 31st March and 1st April.

J.F. Reynolds,
Box 40584, Nairobi.

REFERENCE:

Williams, J.G. (1967) *A Field Guide to the National Parks of East Africa*. London:Collins.

- - - - - - - - - - - - - - -

SCARCE PALAEARCTIC MIGRANTS IN KENYA

1971 - 73

Backhurst, Britton & Mann (1973) reviewed the status of certain less common migrants to Kenya and Tanzania up to 30th June 1971. The present note brings this paper up to date with my personal records; I realise it would be more convenient to be able to refer to an annual summary embracing records from several observers than to be presented with several short accounts, scattered throughout the *Bulletin*, however, the task of compiling such annual reports is, at present, not feasible.

The following records are complete except that the scarce migrants observed at Ngulia during the autumns of 1971 and 1972 are ommitted: these species will be dealt with in a paper (by D.J. Pearson and myself) covering the migration at Ngulia.

Anas crecca Teal

1 male: 11.1.73 KMC pools, Athi River. 1 male: 4.3.73 Naivasha.

Porzana porzana Spotted Crake

1 flushed at my feet: 19.3.73 Kabete.

Charadrius dubius Little Ringed Plover

All at Naivasha: 2: 8.1.72, 1: 13.2.72, 2: 20.2.72, 2: 24.2.72, 1: 12.3.72.

Larus ridibundus Black-headed Gull

c. 15: 7.5.72 Nakuru, 11: 14.5.72 Nakuru, 9: 20.5.72 Nakuru, 7: 11 & 13.1.73. KMC pools Athi River, *c.*20: 25.3.73. Nakuru.

Phalaropus lobatus Red-necked Phalarope

4: 16.1.72 Nakuru, 4 (including 1 ringed): 23.1.72 Nakuru, 2 or 3 (including 1 ringed): 24.9.72 Nakuru.

Calidris temminckii Temminck's Stint

All at Naivasha: 2: 8.1.72, 3 ringed: 13.2.72, 4 ringed: 20.2.72, 2 ringed: 24.2.72, 1 retrapped: 12.3.72, 1: 3.2.73, 1 ringed: 18.2.73.

Gallinago media Great Snipe

1: 29.4.72 Nakuru.

Limosa lapponica Bar-tailed Godwit

1: 4.4.72 Mida Creek, 1 ringed and photographed: 26.11.72 Naivasha.

L. limosa Black-tailed Godwit

3: 18/19.9.71 Nakuru, 3: 13.2.72 Naivasha, 11: 13/14.1.73 Naivasha, 3: 3.2.73 Naivasha, 4: 18.2.73 Naivasha, 4: 25.2.73 Naivasha, 3: 4.3.73 Naivasha, 4: 22.4.73 Naivasha.

Tringa erythropus Spotted Redshank

1: 14.1.73 Naivasha, 1: 18.2.73 Naivasha.

T. totanus Redshank

2: 4.4.72 Mida Creek, 1: 26/27.8.72 Nakuru.

Cuculus poliocephalus Lesser Cuckoo

2: 2.4.72 Mida Creek (this record has already been published, *antea* 1973:84).

Locustella fluviatilis River Warbler

1 ringed: 28.11.71 Kariobangi.

Irania gutturalis White-throated Robin

1 ringed: 14.4.73 Kariobangi

Graeme Backhurst, Box 29003, Kabete.

THE MADAGASCAR PRATINCOLE *GLAREOLA OCULARIS* IN TANZANIA

According to Moreau (1966) all the recorded occurrences of the Madagascar Pratincole in mainland Africa refer to the period August to October and it is not known whether the species is a brief visitor during these months alone or a passage migrant on its way to or from as yet undiscovered non-breeding quarters. Little is recorded about its habits in Africa and Moreau implies that its breeding season in Madagascar is unknown. Most of the published records refer to the Kenya coast between Lamu and Mombasa where it might be called an irregular visitor, sometimes in large numbers. There is but one Tanzanian record - that of H.F.I. Elliot at Dar es Salaam in the August and September of an unrecorded year. Incidently Moreau (*op. cit.*) mistakenly refers to the species of "*Galachrysia nuchalis*" (= *Glareola nuchalis*) which is in fact the White-collared Pratincole.

I can add several April records from the Tanzanian coast and a single May record for inland. I have recorded the species near Dar es Salaam in the two Aprils (1971 and 1973) of my residence here. In 1971 8 birds were seen at MsasaniSalt Pans on 7th April and at least 60 were watched at Kunduchi Salt Pans on 12th April. In 1973 two birds were seen at Msasani on 14th April and four were seen at the same place on 22nd April. In spite of regular watching I have not recorded the species at any other time near Dar es Salaam and although I visitied each site on the day following each sighting I never saw the birds on more than one isolated day.

In each case the birds arrived in the late afternoon, about an hour before dusk, and usually when the tide was high at this time. It is possible therefore that they spent most of their time on the tidal sand flats although I have never seen them there. The birds appeared high in the sky from the direction of the sea and wheeled around, often calling. They alighted on the embankments of the salt pans and either crouched or ran about among the flocks of Palaearctic waders, but they were restless and rarely remained on the ground for long. I have seen them wheeling and turning high in the sky like large swifts, until darkness has fallen. The call which is frequently uttered both in flight and on the ground, is a short 'kriik'.

Most of the birds were dark olive brown above including the head and upper breast with darker brown or blackish flight feathers and tails. The underwing coverts, axillaries and lower breast were warm orange chestnut. On the underparts this faded to whitish towards the tail and the under and upper tail coverts were white. Behind the eye was a distinct white mark but there were no other distinct markings. Among the larger numbers observed in April 1971 I found a considerable variation in the shades of chestnut on the underparts. Some birds were quite dark chestnut below and had darker brown heads and a few had distinct orange cere-like bases to their dark bills. In shape and general behaviour they were like the common Pratincole *Glareola pratincola* but they appeared rather smaller with proportionally shorter forked tails.

My inland record is of a party of six on the edge of a flooded meerschaum clay pit at Sinya on the Kenya - Tanzania border (although actually 100 m within Tanzania!) near Amboseli on 23rd May 1973. The species should be looked for at this time on the edges of the Amboseli pools. This inland record implies that the birds were on their way to their non-breeding quarters and that my April coastal records are of recent arrivals from Madagascar. The previously cited August - October records would then refer to birds on their return passage which suggests that the species breeds in Madagascar between October and March. I would suggest the shores of the alkaline lakes of Magadi, Natron and Eyasi as possible non-breeding quarters.

W.G. Harvey,
Box 9100,
Dar es Salaam.

REFERENCE:

Moreau, R.E. (1966) *The Bird Faunas of Africa and its Islands.* London: Academic Press.

- - - - - - - - - - - - - - -

HEDGEHOGS IN TANZANIA

As Dr Ebbels in Pt. 2 of 'An Introduction to the Natural History of Mwanza Gulf, Smith Sound and adjacent areas, Tanzania' (*EANHS Bulletin* 1973:78-91) states that ". . . . Hedgehogs seem conspiciously absent from this area . . ", it might be worth recording that, while living in Tabora from October 1959 until December 1966 and in Iringa from June 1967 until May 1971, I never encountered hedgehogs *Atelerix pruneri* though I was constantly in "the bush" which, in these stations, was only a stone's throw from where I was living. Swynnerton & Hayman (1950) record the species from Tabora but not from Mwanza.

J.F. Reynolds,
Box 40584,
Nairobi.

REFERENCE:

Swynnerton, G.H. & Hayman, R.W. (1950) A Checklist of the Land Mammals of Tanganyika Territory and the Zanzibar Protectorate. *Jl E. Afr. nat. Hist Soc.* 20:274-392.

- - - - - - - - - - - - - - -

NEST RECORD SCHEME - NEW ADDRESS

Would contributors who missed the note in the June issue of the *Bulletin* and who still have cards for 1972, please send them as soon as possible to the following address:

Mrs H.A. Britton,
Shimo-la-Tewa School,
Box 90163, Mombasa.

- - - - - - - - - - - - - - -

REVIEWS

Ripley, S.D. & Bond, G.M. 1971. Systematic notes on a collection of birds from Kenya. *Smithsonian Contributions to Zoology*. 111:1-21.

Zimmerman, D.A. 1972. The avifauna of the Kakamega Forest, western Kenya, including a bird population study. *Bull. of the Am. Mus. of Nat. Hist.* 149(3):257-339. Price US $3.40.

These two papers can conveniently be considered together, as the first is, in part, complementary to the second. Ripley & Bond have notes on birds collected for the Smithsonian Institution by myself during 1964 - 1966 in the Kakamega and Sokoke Forests of Kenya. Although published before Zimmerman's, their lists of species are more up to date and complete as the Zimmerman paper was so long delayed before publication. However, he has more information on the living bird, in most cases confined to those species he found in 1963, 1965 and 1966 on his 20 acre study tract just behind the Forest Department Resthouse; in fact, these include virtually all the known forest species. Ripley & Bond's lists include all the non-forest species then known from the areas.

Both papers have introductions to the forest; Zimmerman analyses his census and includes an impressive list of recoveries (= recaptures) of ringed birds. The final eight pages are concerned with an analysis of Kakamega as a lowland forest. As always, different workers will never entirely agree on the exact species which should be included as forest birds, but generally I think that Zimmerman's assessments are correct.

Ripley & Bond describe three new subspecies:

Francolinus jacksoni patriciae	Cherangani Mountains:
Ciccaba woodfordi sokokensis	Sokoke Forest;
Pogoniulus bilineatus pallidus	Sokoke Forest.

As an appendix to their paper I make an appeal for the protection of these two unique Kenya forests, which are being reduced in area at a very alarming rate.

A.D.F-W.

- - - - - - - - - - - - - - -

CORRECTION

Bulletin 1973: 78. An introduction to the Natural History of Mwanza Gulf, Smith Sound and adjacent areas - Line 1. "To the west of Mwanza Gulf" should read "To the east of Mwanza Gulf".

- - - - - - - - - - - - - - -

REQUEST FOR INFORMATION

In the July 1972 issue of the *Bulletin* Mr J.F. Reynolds reports his interesting observations on nest helpers in the White-throated Bee-eater *Merops albicollis*. He found at some nests that at least four birds, the breeding pair and two helpers, fed the nestlings. This co-operative breeding behaviour is well known in other African bird families, the most well documented being those of the Helmet Shrikes *Prionops* and the Wood Hoopoe *Phoeniculus purpureus*. Recent studies have shown it to be regularly found in the shrikes *Corvinella corvina* and *C. melanoleuca* and probably will be found in other gregarious East African shrikes.

I have been asked to review co-operative breeding in African birds and would appreciate receiving observations, direct or circumstancial, that readers may have relating to this behaviour. By receiving such information the review will be more up to date than would be possible only through a survey of the literature.

Because of postal difficulties for some countries, I give two contact addresses.

L. Grimes.

(1) Zoology Department, University of Ghana, Legon, Ghana.

(2) 116 Marina, St. Leonards on Sea, Sussex, England.

- - - - - - - - - - - - - - -

SOCIETY FUNCTIONS

Saturday 11th/Sunday 12th August 1973: Week-end excursion to the Selengai area. Leader Miss Malcolm-Coe. Distance from Nairobi 160 km (100 miles). Altitude about 1300 m (4000 ft). Members should be self contained with all camping equipment, food, plenty of water and also petrol for the return trip. Camping will be along a dry sand river (very hot during the day but cool at night) with springs frequented by cattle during the day and game at night, the moon will be just after full. Early mornings normally give good views of Sandgrouse coming to drink. Members wishing to take part in this excursion should fill in the enclosed form and return it to Mrs A.L. Campbell, Box 14469, Nairobi, not later than 4th August. The numbers will be restricted to 17 cars. Further directions will be sent to those taking part.

Monday 13th August 1973 at 5.15 p.m.: at the National Museum Hall, Nairobi. Mr E.R. Robson will give an illustrated lecture on "East African Marine shells".

Saturday 15th/Sunday 16th September 1973: Week-end excursion to the Kedong Valley. Details next issue.

Monday 17th September 1973 at 5.15 p.m.: at the National Museum Hall, Nairobi. Mr J.F. Reynolds will give an illustrated lecture on "Birds far and near". *Please note:* This lecture has been changed from the previously advertised 10th September, as the hall is being used for a conference on the original date.

Nairobi members are reminded that Wednesday morning bird walks are held every week, please meet at the National Museum at 8.45 a.m.

- - - - - - - - - - - - - - -

SOLAR ECLIPSE OBSERVATIONS

The Society will be publishing a special issue of the *Journal* which will contain papers by members of the National Museums' Eclipse Expedition; in addition, Society members with eclipse observations are invited to contribute. Please send all material to A.D. Forbes-Watson, Ornithologist, National Museum Box 40658, Nairobi, who will be editing the special issue.

Ed.

- - - - - - - - - - - - - - -

SOME RECENT PERIODIC LITERATURE AVAILABLE IN THE LIBRARY

Ash, J.S. 1973 Six species of birds new to Ethiopia. *Bull.Br.Orn Club* 93:3-6.

Beesley, J.S.S. 1973 The breeding seasons of birds in the Arusha National Park. *Bull.Br.Orn. Club* 93:10-20.

Britton, P.L. 1973 Seasonal movements of the Black Cuckoo-shrikes *Campephaga phoenicea* and *C. flava*, especially in eastern Africa *Bull.Br.Orn. Club* 41-48.

Cooper, J.E. 1973 Blood parasites from a Red-chested Owlet *Glaucidium tephronotum*. *Bull.Br.Orn. Club* 93:25-26.

Kremer, M. 1972 Redescription de *Culicoides imicola*, *C. alticola* et *C. tropicalis* Kieffer sur des exemplaires determinés par l'auteur (Dipt.) *Bull.Mus.Natl.Hist.Nat.Zool.* No.58.

Mazur, S. 1972 Remarks on some new and more interesting tropical Histeridae (Coleop.) *Ann.Zool. Warsaw* 39:361.

Monod, T. 1972 Sur un nouvel examplaire d'Accalathura (Crust.Isop.) d'Afrique Orientale. *Bull.Mus.Natl.Hist.Nat.Zool.* No.68.

Munn, R.F. 1973 The East African Literature Service. *UNESCO Bull. for Libraries* 27:29.

Pearson, D.J. 1973 Moult of some Palaearctic warblers wintering in Uganda. *Bird Study* 20:24.

Sibley, C.G. & Ahlquist, J.E. 1972 A comparative study of the egg white proteins of non-passerine birds. *Peabody Mus.Nat.Hist.Bull.* 39.

Thomas, D.K. & Elliott, H.F.I. 1973 Nesting of the Roseate Tern *Sterna dougallii* near Dar es Salaam. *Bull.Br.Orn. Club* 93:21-23.

Thomson, K.S. 1973 Secreta of the Coelaecanth. *Nat.Hist. N.Y.* 82, No.2:58.

Van Someren, G.R. Cunningham- 1973 *Tringa hypoleucos* Linn. breeding in E. Africa. *Bull.Br.Orn. Club* 93:39-40.

- - - - - - - - - - - - - - -

NEW MEMBERS - AUGUST 1973

Full members:

Mr Richard Bardner, Box 4, Ruiru.
Dr David S. Brown, Medical Research Council, Box 1971, Kisumu.
Miss J. Chapman, Box 14601, Nairobi.
Mr E.H. Chidumayo, Zoology Dept., Box 30197, Nairobi.
Mrs Winsome Clarke, Box 40431, Nairobi.
Mr D.J. Duprée, Box 72021, Nairobi.
Miss P. Eggleton, Box 24657, Karen, Nairobi.
Mr L. Gardo, Box 44391, Nairobi.
Mrs C.F. Gebbie, Box 30588, Nairobi.
Mrs J. Godfrey, B.A., M.R.C.V.S., Box 14601, Nairobi.
Miss F. Hammett, Box 723, Mbeya, Tanzania.
Mrs D.N. Meynink, Box 24845, Nairobi.
Mr P.W. Mumiukha, Kenya Wildlife Management Project, Box 31559, Nbi.
Mrs H. Potgeiter, Box 110, Nanyuki, Kenya.
Mr A.R. Sayers, Box 30148, Nairobi.
Mr Stephen Spawls, Box 72842, Nairobi.
Mr T.A. Vaughan, Bushwhackers, P.O. Kibwezi, Kenya.

- - - - - - - - - - - - - - -

NUMBERS OF PALAEARCTIC WADERS IN EAST AFRICA

Members of the Zambian Ornithologists' Society, led by J.J. Tucker, are conducting wader counts in Zambia and, to make their results more meaningful, they would like bird watchers in East Africa to make similar counts up here.

Mr Tucker has produced forms so that the counts for one locality can be entered on one sheet; I have a few forms but others are available from him at Box 8096, Woodlands, Lusaka, Zambia. Palaearctic waders have started to return already so, if you are willing to help, please contact Mr Tucker or me as soon as possible.

Graeme Backhurst,
Box 29003,
Kabete, Nairobi.

- - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings.

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN SEPTEMBER 1973

CONTENTS

Fossorial Snake gives live birth - 122

An unusual concentration of Sand Snakes - - - - - - - - - - - - - - - - - 122

The misplaced affections of a Mouse-coloured Sunbird - - - - - - - - - 123

"Ngara" at the bird table - 125

Field trip to Magadi - 126

Reviews - 127

Requests for information - 128

Editorial notice - 129

Society functions - 129

Some recent periodic literature available in the Library - - - - - - 130

New Members - 131

For Sale - 132

FOSSORIAL SNAKE GIVES LIVE BIRTH

On 9th April 1972 I collected four specimens of Jackson's centipede-eating snake *Apparallactus jacksonii jacksonii* under rocks at the base of a small rocky hill on the south-eastern shore of Lake Naivasha. The four specimens were housed in my collection. Around the middle of May I noticed one specimen a female 235 mm long appeared to be pregnant, and by the beginning of June her body was extremely distended.

At the time, most of the literature I had read led me to believe that all specimens of this genus were oviparous i.e. they laid eggs. However, on the morning of 8th June I examined the female and discovered that her body was no longer distended. Believing that she must have laid eggs, I searched in the soil of the cage. I did not find eggs however, but two perfectly formed young snakes. They were male and female, measuring 102 and 105 mm respectively. They were quite quick and active, and fed on small centipedes a few hours later.

Upon checking as much relevant literature as I was able to obtain, I was unable to find one definite case of a captive *Aparallactus* actually reproducing in captivity. In Loveridge's excellent paper (*Bull. Mus. Comp. Zoo. Harvard* 95 No.2) on *Aparallactus*; under "breeding" he quotes several cases of various specimens being found with eggs inside them, but no case of a female actually laying eggs or giving birth. All breeding records I have uncovered however, refer to other species of *Aparallactus*. So far as I know this is the first record of breeding in *Aparallactus j. jacksonii.*

Little is known about this interesting genus of snakes - which seems to be the case with most genera of fossorial snakes e.g *Miodon, Calamelaps.* For all that is known, all species of *Aparallactus* may give live birth. The presence of eggs inside a mother's body is no indication that the eggs are actually laid - they may well develop and hatch inside the body of the mother snake.

I would be most grateful if any other member could supply more information on this interesting subject.

Stephen Spawls,
Box 72842,
Nairobi.

- - - - - - - - - - - - - - -

AN UNUSUAL CONCENTRATION OF SAND SNAKES

On 12th June 1973 I was staying at Materi mission, which is on the western edge of the Tharaka plain, about 65 km north-east of Embu. The country is scattered thorn bush, interspersed with rocky hills and dongas. The altitude is around 700 m.

About 10.00 h I was called by one of the local people to catch a snake that he had seen. On arrival, I spotted what was in fact a pair of Southern Speckled Sand snakes *Psammophis punctulatus trivirgatus*, both were around 1.5 m long, actually copulating 2 m up in a bush. I climbed up and managed to seize both snakes; as I was descendingthe local man informed me that he had seen another snake in the same bush. I bagged both snakes and then investigated the other snake, which was also a speckled sand snake, about 1.2 m long, lying on a low branch. As I approached, however, it darted off into thicker bush and I failed to catch it.

Shouts then informed me that another snake had been spotted, yet another speckled sand snake which was lying under an adjacent bush. I managed to catch it and bag it and we then thoroughly checked the surrounding bushes, where we discovered two more speckled sand snakes one of which I caught, and a link-marked sand snake *Psammophis biseriatus* which I also caught.

On examination of the specimens later, I discovered that I had one female and three male speckled sand snakes, the original pair plus two males. The link-marked sand snake was also a male.

My belief is that the male snakes were following the female and that the two snakes I missed were probably males also. It is known that female rattlesnakes *Crotalus* sp. on heat release a fluid from glands beneath their chins which attracts males, sometimes in massive numbers. Perhaps our African *Psammophis* can do the same?

I would be interested to know if any other members have seen any such grouping among other snakes, an order of reptiles nor normally considered gregarious.

Stephen Spawls,
Box 72842,
Nairobi.

- - - - - - - - - - - - - - -

THE MISPLACED AFFECTIONS OF A MOUSE - COLOURED SUNBIRD

NECTARINIA VEROXII

The Long-bill *Macrosphenus kretschmeri* is a local and little known species of uncertain affinities. Mackworth-Praed & Grant consider it to be a Bulbul (*Suaheliornis kretschmeri* - Kretschmer's Greenbul) but more recent writers, e.g. Hall & Moreau 1970, *An Atlas of Speciation in African Passerine birds*, place it in the genus *Macrosphenus* as a warbler. The following account suggests that at least one Mouse-coloured Sunbird thinks it should be classed in the Sunbirds!

Longbills are quite common in the dense secondary cover of the remnant lowland forest on the Pugu Hills some 20 km southwest of Dar es Salaam. They are extremely difficult to see but will respond to the playback of their distinctive three note song and may then be glimpsed slipping through the undergrowth. On 28th July 1973 I heard what I thought was a Lonbill singing in a small patch of thicket on the University of Dar es Salaam campus. The habitat was unusual but I thought it might have been a wandering male from the Pugu Hills.

On 29th July I returned to this thicket with my taperecorder and, although the "Lonbill" was not singing, I played a particularly loud recording of a Longbill made some months before in the Pugu Hills. Almost immediately a slim greyish bird with a long bill slipped into the patch of thicket about 2 m from the recorder and began singing a quiet warbling subsong. I crept closer to the bird and was surprised to see that it was a Mouse-coloured Sunbird. It sat on a branch about 1.5 m away from me singing softly and turning its neck round trying to trace the source of the Longbill recording. At the same time it raised and lowered and shivered its wings (rather in the manner of the Palaearctic Dunnock *Prunella modularis*). There was no doubt that it was considerably attracted to the song of the Longbill that I was playing.

On 31st July I returned to the same thicket and played the Longbill recording again. This time two Mouse-coloured Sunbirds appeared and the female (separated by the smaller size and less obvious red chest tuft) began to shiver its wings and flutter near me. After a few minutes it joined the male which was moving restlessly through the thicket and giving a harsh churring alarm call. While this was going on I heard another Mouse-coloured Sunbird singing at some distance and realised that this was the song I had originally heard in the area (on 28th July) and taken to be a Longbill. I approached this bird and recorded its song immediately after the recording of the Pugu Hills Longbill on my taperecorder. Playing back both songs to the singing Mouse-coloured Sunbird appeared to be too much for it and it stopped singing. However, juxtaposing the two songs emphasised to me how similar they are.

The Longbill's song is a loud mellow sequence of three clearly separate notes which might be rendered "eet te chweed" with a definite emphasis on the first syllable and on the hard ending of the last syllable. The Mouse-coloured Sunbird's song is softer (though still loud for a sunbird) and more rapid sequence of three notes "de te chwee" with the emphasis on the last syllable. On other occasions I have heard it singing several single syllables before singing the three note sequence and these syllables often have a soft "chwe"sound to them.

Whilst my confusion of the two songs might be understandable it seems remarkable that another, supposedly unrelated, species should be mislead to this extent. It would be interesting to observe the reactions of Mouse-coloured Sunbirds to live Longbills (and vice versa) but both species seem to have a better appreciation of their respective habitats than I do and are unlikely to come into contact in this way.

W.G. Harvey,
Box 9100,
Dar es Salaam.

- - - - - - - - - - - - - - -

"NGARA" AT THE BIRD TABLE

Following Mary Rickman's article about a Nairobi bird table ***EANHS Bulletin*** 1972:202. I finally got round to putting one up in late January 1973. After a few days it was regularly visited by Fire Finches *Lagonosticta senegala*, Streaky Seed Eaters *Serinus striolatus* and, subsequently, by most of the species listed by Miss Rickman which are also common garden birds at Muguga.

An unexpected bonus was the attraction of two families of Ngara, Striped Grass mice *Lemniscomys striatus*, who came to gather grain spilt from the table. Ngara are pretty and easily tolerated residents in the garden and the bird table brought them into easy viewing range from the dining room window. The table stands at the edge of a small lawn.

At first only three or four adults were seen picking up wheat (mainly) and scuttling away, but they soon became tamer and would sit eating a grain held between their forepaws, like tiny squirrels. They learnt to ignore the dog who lay in the sun about 3 m away and passing shadows of high-flying Kites and Augur Buzzards, apparently knowing that they could get to cover in time. At first they looked up and lifted their tails preparatory to scuttling away, but soon ignored high-flying birds altogether. They would confront small seed-eating birds, such as Rufous Sparrows and Streaky Seed-eaters feeding on the grass beside them, but a low-flying bird of any kind visiting the table usually caused a dash for cover.

In early April, two families of three and four young respectively began to appear at the edge of the lawn and, after a week, were venturing 2 m or more from cover. At that time they were about one third of the length of the adults and uniform grey without stripes. They had disproportionately large ears, almost as big as the adults' ears. In about three weeks they had grown to almost half the length of the adults and developed the usual brown colour with pale stripes on the back. By the end of May, presumably about three months from birth, they were like the adults and so nearly the same size that it was difficult to distinguish them unless the adults and young were seen together. The families broke up in June and, while we still have Ngara at the bird table, I can no longer tell parents from young.

Ken Bock tells me that he also has Ngara at his bird table at Muguga, but that the small young in his Ngara families were by no means so uniformly mouse grey as were ours.

W.G. Dyson,
E.A.A.F.R.O., Muguga,
Box 30148,
Nairobi.

FIELD TRIP TO MAGADI, 29th - 30th JULY

About 50 people, including children, took part in this expedition under the efficient leadership of Mrs Kenyon. Though there were some 16 cars, there was plenty of room along the ridge by the road to the hot springs. In the evening we paid a visit to Bird Rock and the lake shore there, and members enjoyed the unfailing thrill of seeing hundreds of Flamingoes *Phoenicopterus ruber* and *minor*, Pelicans *Pelacanus onocratalus* and *rufescens*, Cape Wigeon *Anus capensis* and Magadi Plovers *Charadrius pallidus*. Yellow-billed Storks *Ibis ibis* seemed to be there in unusual numbers, and another less usual sight was the flocks of Pratincole *glareola pratincola* some in juvenile plumage.

In camp after dark Mr Silvano Borruso kindly gave members a great deal of pleasure by singing songs to his guitar. This was much enjoyed and helped to bring the party together.

Early next morning we all went along to the hot springs. Some of us watched a brown eagle (it looked too small for a Tawny *Aquila rapax*) being mobbed by Blacksmith Plovers *Vanellus armatus*. It dropped into the grass and seemed to pick up some small object, we could not see what, and fly off with it, while the Blacksmith Plovers went for it hammer and tongs.

Of course there were all the other interesting things to see at Magadi, algae, flies, fishes, earwigs and the wonderful colours and glistening white of the soda itself. It is a fascinating place.

Some members who went down on the friday and camped by the road (Ologasaile camp is occupied at present by a party of students) had a magnificent view of a Lammergeier *Gypaetus barbatus* as they climbed the shoulder of the Ngong Hills, and noted also that the *Leonotis* along the sides of the road was thronged with Malachite Sunbirds *Nectarinia famosa*.

I might perhaps end with two suggestions which, if accepted, would make the running of these expeditions much easier. One is that participants should make a serious effort to reach the meeting place on time. On this occasion those who took the trouble to do this had to wait three quarters of an hour for late comers. Fortunately the day was cool and overcast. Had Magadi been its usual self, it would have been an unpleasant wait in the sun outside the Police Station. It is true that some members had to change wheels, but one punctured vehicle nevertheless managed to get there only 15 minutes late; presumably its people had allowed a margin of time for unexpected delays. Some others seemed to have allowed rather less than no margin at all.

The other suggestion is that on approaching an area of special interest, such as a dam wall, or (in this case) the hot springs, those in front, especially if they have children with them, should wait a moment or two for others to catch up before rushing into the area and putting everything to flight. They may have done this; I was right at the back and could not see, so I speak on general principles. Of course at the hot springs there is enough to satisfy everyone, but the full richness of the area undisturbed is seen only by those who get there first.

P.M.A.

- - - - - - - - - - - - - - - -

REVIEWS

TWO NEW PARTS OF *THE FLORA OF TROPICAL EAST AFRICA*

Combretaceae by G.E. Wickens pp.100, fig.14, price in UK £0.87

Lemnaceae by F.N. Hepper pp.10, fig.2, price in UK £0.16

Both published in May 1973 by the Crown Agents and available from Governmant Bookshop, Box 569, London SE1 9NH and other Government Bookshops in the UK or the Government Printer, Box 33, Entebbe; Government Printer, Box 30128, Nairobi; Government Publications agency, Box 1801 Dar es Salaam.

The Combretaceae is a tropical family of trees, shrubs and woody lianes with 74 species in East Africa. They are found in all parts of the country except the high mountains but are commoner in more open vegetation types than in closed forest. *Combretum* with its 4 - or 5 - winged fruits is the best known and commonest genus. The Lemnaceae ("Duck weeds") are tiny free-floating aquatic plants found in pools or very sluggish streams in all parts of the world. There are 9 species in 5 genera in East Africa.

Some 84 parts of this flora, all well illustrated, have now appeared, dealing with some 2870 species, about a quarter of the estimated total for East Africa. The Government Printer in Haile Sellassie Avenue, Nairobi keeps all parts in stock and issues a price list on request.

J.B.G

EAST AFRICAN MOUNTAINS AND LAKES by Leslie Brown 122 pp.
E.A. Publishing House, Nairobi. Price E.A. Sh.21/-.

This book is already a year old but I came across it only recently and I feel that I must recommend it to other members.

It is a small book of only 122 pages with a number of good photographs and useful diagrams. The author, who has been a member of our Society since 1956, manages in this short space to cover not only topographical and climatic features of the Great Rift Valley but also the life and behaviour of the unique birds and beasts found there. Adequate space is given to the importance of the vegetation in supporting the lake fauna. Mr Brown takes the reader along up to Ethiopia and down as far as Tanzania, crossing moorlands and swamps, forests and fresh water lakes, deserts and alkaline lakes to see at first hand the fascinating relationships of animals and plants living there. The nine short chapters are generously filled to the brim with the skill of a trained and experienced naturalist.

J.R.O.

- - - - - - - - - - - - - - -

REQUESTS FOR INFORMATION

WHERE DO ALL THE SUNBIRDS GO ?

Since July 1971 we have colourmarked over 700 sunbirds during studies of their behaviour and ecology. Nearly all of these sunbirds have been marked at three localities: Gilgil, Hell's Gate near Lake Naivasha, and at a locality south-east of S. Kinangop. We have marked eight species of sunbirds, primarily Malachite *Nectarinia famosa,* Golden-winged *N. reichenowi* and Bronzy *N. kilimensis.* Each bird was given an unique combination of coloured rings and an aluminium numbered ring supplied by the East Africa Natural History Society's Ringing Scheme. Any bird can be individually recognised by reading the colour code combination as follows: right leg top ring, right leg bottom ring (if present), left leg top ring, left leg bottom ring (if present). Thus the code RY-RX means the top rings on both legs were red, the bottom ring on the left leg was an aluminium numbered. Some birds were ringed with only three rings, two coloured and one aluminium, and a very few birds in 1971 were ringed with only two rings. To date we have used red, orange, yellow, green, blue, purple and white coloured rings in various combinations.

Because sunbirds travel widely in their search for flowers and often visit gardens, it is likely that members of the EANHS or their friends will see one of our colourmarked individuals. We appeal to anyone who notices such a bird to write down the colour combination, and send it with species identification, sex,date of observation and locality to the Ringing Organizer, EANHS Box 29003, Kabete, Nairobi. Any reports will give us valuable information on the nature and extent of sunbird movements in central Kenya.

We would also appreciate learning of the locations of large patches (0.5 - 1 h in extent) of flowering *Leonotis,* the flower which attracts so many of these sunbirds and which is one of the principle subjects of our studies.

Frank B. Gill,
Larry L. Wolf,
c/o Alec D. Forbes-Watson,
National Museums of Kenya,
Box 40685, Nairobi.

I have been living at Kabete for over nine years and think it is about time I wrote up my observations and records of birds for the area. I would like to receive Kabete records from people, especially from those who live near the Welcome (= Cooper's) Dam and Sinclair's (= Lovatelli's) Dam. So far I have recorded about 250 species at Kabete. I look forward to receiving your records, full acknowledgement will, of course, be given.

Graeme Backhurst,
Box 29003,
Kabete, Nairobi.

- - - - - - - - - - - - - - -

EDITORIAL NOTICE

I shall be on leave abroad for the next two months or so although I shall continue to edit the *Bulletin*. It would be a great help if material could be sent to me at: 138, Elibank Road, London SE9 IQN, England, until the end of October. Any material sent to Kabete or Nairobi will be forwarded but there may be some delay. I might add that I have no matter in hand for the October issue, so please send your contributions as soon as possible.

Ed.

- - - - - - - - - - - - - - - -

SOCIETY FUNCTIONS

Saturday 8th September 1973: Afternoon visit to Ondiri Swamp, Fallside Farm, Kikuyu, by kind invitation of Major C.P. Lucas and Mr and Mrs C. Luxmoore. Please meet at the National Museum car park at 2.30 p.m. bringing a picnic tea.

(14th), 15th/16th September 1973: Week-end camp at Harefield Estate, Kedong Valley, by kind invitation of Mrs C. Mayers. Distance from Nairobi about 55 km, altitude about 2000 m. Members should be self-contained with all camping equipment, food and water for their party. Birdwatching is very good in the vicinity. If you wish to take part in this camp, please fill in the appropriate enclosed form and return it to Mrs A.L. Campbell, Box 14469, Nairobi, not later than 4th September, and directions as to how to reach the farm will be sent to you.

Monday 17th September 1973 at 5.15 p.m.: at the National Museum Hall, Nairobi. Mr J.F. Reynolds will give an illustrated lecture: "Birds far and Near".

6th/7th October 1973: Week-end camp at northern end of Chyulu Hills. Mr and Mrs Luxmoore will lead an excursion to this beautiful scenic area with chances of good game - and birdwatching. Distance from Nairobi about 205 km, altitude of camp about 1200 m. Campers should be self-contained with all equipment, food and water. If you wish to take part in this excursion, please fill in the appropriate enclosed form and return it to Mrs A.L. Campbell, Box 14469, Nairobi, before 22nd September 1973, when a route map and further information will be sent to you.

Monday 8th October 1973 at 5.15 p.m.: at the National Museum Hall, Nairobi "Natural History Observations during the Eclipse" by members of the National Museum Expedition to Lake Rudolf during the Eclipse.

3rd/4th November 1973: Week-end at the "Marina", Lake Naivasha. Special rates have been offered to the Society for this week-end: Full board in cottages Sh.60/- per person. Do-it-yourself cottages Sh.50/- double. Camping Sh 12/50 per tent per night (no limitation on numbers of people). Visit will be arranged to Crescent Island.

If you wish to take part in this excursion please send full payment by crossed cheque, made out to Naivasha Marina and post to Mrs A.L. Campbell, Box 14469, Nairobi before 25th October 1973.

Monday 12th November 1973 at 5.15 p.m.: at the National Museum Hall, Nairobi. Mr John Cooper, M.R.C.V.S. will speak on the care and treatment of injured wild mammals and birds.

8th/9th December 1973: Visit to Ngoina Eastate, Kisii District. Leaders: Mr and Mrs L.A.S. Grumbley. Details later.

Monday 10th December 1973 at 5.15 p.m. at the National Museum Hall, Nairobi. Mrs J. Rudnai will speak on "Lion Behaviour".

- - - - - - - - - - - - - - -

SOME RECENT PERIODIC LITERATURE AVAILABLE IN THE LIBRARY

Banister, K.E. 1972 On the Cyprinid fish *Barbus alluaudi* Pellegrin: a a possible intergeneric hybrid from Africa. Pt.I. *Bull. Br. Mus. Nat. Hist (Zool.)* 24:263.

Bolwig, N. 1973 Agonistic and sexual behaviour of the African Ostrich (*Struthio camelus*). *Condor* 75:100.

Breuning, S. & Villiers, A. 1972 Coléoptères cerambyciae de l'Afrique orientale. *Monit. Zool. Ital.* Suppl.4, p.309.

Cade, T.J. 1973 Sun-bathing as a thermoregulatory aid in birds. *Condor* 75:106.

Crompton, A.W. 1972 Postcanine occlusion in Cynodonts and Tritylodontids. *Bull. Br. Mus. Nat. Hist (Geol.)* 21:29.

Frey, G. 1972 Ueber einige Oniticellini und Onthophagini aus Ostafrika mit Beschreibung einer neuen Art (Coleopt. Scarabaeidae). *Monit. Zool. Ital.* Suppl.4, p.309.

Jolly, C.J. 1972 The classification and natural history of *Theropithecus (Simopithecus)* (Andrews, 1916), Baboons of the African Plio-pleistocene. *Bull. Br. Mus. Nat. Hist. (Geol.)* 22:3.

Lucas, M. & Wallace, I. 1973 Chromosomes of *Gorilla gorilla gorilla.* *J. Zool.* 169:403.

McKay, G.M. 1973 Behaviour and ecology of the Asiatic Elephant in South-eastern Ceylon. *Smithsonian Contrib. Zool.* No.125.

Moore, Adams & Lavelle 1973 Head postures in the hominoidea. *J. Zool.* 169:409.

Myers, N. 1973 A naturalist at large: the people crunch comes to East Africa. *Natural History, New York* 82 No.1:10.

New, T.R. & Haddow, A.J. 1973 Nocturnal flight activity of some African Mantispidae (Neuroptera). *J. Ent.(A)* 47:161.

Sands, W.A. 1972 Problems in attempting to sample tropical subterranean termite populations. *Ekologia Polska* 20:23.

- - - - - - - - - - - - - - -

NEW MEMBERS - SEPTEMBER 1973

Full members:

Mr & Mrs Richard Bowker, Bushwhackers, P.O. Kibwezi.
Miss G.L. Davis, Box 48629, Nairobi.
Mr M.P.V. Hannam, Box 30465, Nairobi.
Miss S.L. Hesgard, Box 42276, Nairobi.
Mrs Alice McLeven, Box 43000, Nairobi.
Mr W.O. Orwa, Box 49722, Nairobi.
Mrs G. von Pischke, c/o I.D.S., Box 30197, Nairobi.
Mr Thomas D. Scott, Box 41081, Nairobi.
Miss Gloria B. Seneres, Box 48177, Nairobi.
Mr Philip Walshe, c/o U.N.D.P., Box 30197, Nairobi.
Dr Helmut Walter, U.N.E.S.C.O., Box 30592, Nairobi.
Mr C.M. Wood, Box 40431, Nairobi.

Junior member:

S.B. Squire, Box 1275, Nakuru.

- - - - - - - - - - - - - - -

FOR SALE

The following journals are being offered for sale by a member who is leaving for the benefit of the Society. Price Sh.2/- each.

WILD LIFE

Vol.1 No. 1-4
Vol.2 No. 1-4
Vol.3 No. 1-4

AFRICANA

Vol.5. Nos. 1-2

- - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

Editor: P.O. Kabete, Kenya

EANHS Secretary: Box 4486 Nairobi, Kenya.

OCTOBER

EANHS BULLETIN ~~SEPTEMBER~~ 1973

CONTENTS

A note on the Twitching of Discarded Legs of Pholcid Spiders - - - - - 134
How to identify Butterflies to their Families II - - - - - - - - - - - - 134
Do You Know That: Part V. - 136
Some Notes on Five Species of Chameleon kept in Captivity at Nairobi - 137
A New Gull for Kenya *Larus Ichthyaetus?* - - - - - - - - - - - - - - - 138
A Recent Breeding Record of Skimmers *Rynchops Flavirostris* in Tanzania - 139
On the Wintering of the Sprosser *Luscinia Luscinia* and the Marsh Warbler *Acrocephalus Palustris* in Kenya - - - 140
Camp on Mr. C.H. Mayers' Farm, Kedong, 14-16 September - - - - - - - - 141
Journals - 141
Pandanus 'Embuensis' (St.John ined.) An interesting 'Screw Pine' in need of Preservation - 142
Book Review - 143
Some Recent Periodic Literature Available in the Library - - - - - - - 143
Society Functions - 144
New Members - 144

EDITORIAL NOTICE

We apologise for the delay in this issue of the Bulletin. This has been caused by circumstances beyond our control.

A N.S.

- - - - - - - - - - - - - -

A NOTE ON THE TWITCHING OF DISCARDED LEGS OF PHOLCID SPIDERS

Spiders belonging to the family Pholcidae occur commonly in Kenya. I have found various species near Lake Baringo, under stones on the Olorgesailie road, in culverts under the main road to Namanga and in houses at Lamu. They all show an interesting behaviour which probably helps them to avoid predation. If a leg is seized, it is immediately discarded (autotomised) at the coxo-trochanteral joint and rapid twitching movements ensue for several seconds or minutes in the isolated leg. The spider meanwhile either lies motionless or runs rapidly away while the predator presumably is attracted to the twitching leg. Harvestmen *Opiliones* are known to behave similarly. The behaviour is reminiscent of that of lizards' tails which twitch when shed. However in lizards the behaviour is more readily explicable since the abandoned tail contains part of the central nervous system ; but the spiders' legs probably contain only sensory nerves and the broken axons of motor nerves supplying the muscles. Moreover spiders' legs contain only flexor muscles, extension being achieved by blood pressure. The origin of the twitching is therefore a mystery and I am trying to find out more about it by recording the electrical activity of discarded legs. I would be glad to hear of any observations on similar activity in other arthropods. The English Pholcid, *Pholcus phalangioides*, does not twitch its discarded legs, but English harvestmen to so.

P.L. Miller,
68, Blenheim Drive,
Oxford, England.

HOW TO IDENTIFY BUTTERFLIES TO THEIR FAMILIES II.

For the introduction and the Papilionidae see *antea* 67.

PIERIDAE - THE WHITES AND YELLOWS

This is a large group of butterflies in East Africa of medium to small size, mostly yellow or white, with one mainly black species.

To tell them in the field can be difficult without experience. Some like the African Migrant *Catopsilia florella* and certain of the African Whites *Belenois* sps. migrate in large numbers (these are the common white butterflies seen flying in one direction at certain times of the year). None of the species glide, but some flutter along apparently aimlessly, the Grass Yellows *Eurema* sps. being the most obvious. These are the bright yellow butterflies, small in size, seen flying amongst grass stems. When feeding the Pieridae always settle with their wings held firmly over their backs and in some of the species the males drink at damp patches.

The insect in the hand can be identified by its six walking legs (similar to the Papilionidae) but never has tails on the hindwings. The wings have a rounded outline, with a few having an indented hindwing. The scales on the wings appear thick and powdery in most species, but some of the deep forest Pieridae appear almost transparent due to the widely spaced scales.

The palps are large and project in front of the head and can normally be seen on a 35mm slide. The hindwing vein nearest the body is straight, and not curved as in Papilionidae.

The sexes of Pieridae are normally easy to tell as they are different colours, or patterns, very few of them being the same. Some species, like the African Clouded Yellow *Colias electo* have more than one female form.

The ova are normally shaped rather like a ½ litre beer-bottle with prominent ribs from top to bottom, and of a light to bright yellow when first laid, changing to a greyish colour before the caterpillar hatches. The caterpillars are normally smooth with a short fine downy coat of hair all over. Most of them are green with a yellow line down the side but some have bright yellow or orange patches on the back. The pupa is similar to that of the Papilionidae, being held in position by a thread of silk around the middle and a pad of silk at the tail. They usually have only one central projection on the head and no bump in the centre of the back. Many of them are flecked with deep black

DANAIDAE - THE MONARCHS

A rather small family of medium to large butterflies in East Africa. All are highly distasteful to predators. They are often mimicked by other families of butterflies and some families of moths, so care on identification must be exercised. Most of them are black and white, sometimes with large areas of yellow or tan.

In the field the best characters are the colours, the rounded wing-shape and the slow flight which often includes floating. Only one is found commonly in open situations, being tan and black, sometimes with white. All the others are found either in dense bush or in the forests. In all the species the forelegs are short and useless for walking. Both sexes normally have their wings half open when feeding on flowers, but the males, at damp patches, always have their wings shut.

In the hand they may immediately be identified by the colouration and the spotting on the body, in most cases very many white spots, which are found only on the head and thorax.

The sexes may be identified by the males' scent-patch which is either just outside the hindwing cell, showing as an extra black spot, or just where the end of the body touches the hindwings near the edge of the wing. Sometimes this patch is difficult to see, but looking through the wing at a strong light will show it as a duller patch in the black border. If this test fails a light pressure on the middle of the abdomen will cause two "brushes" of hairs to come out of the tail in the male. This will do no harm to the butterfly. Often, when they are caught, they play dead in the net.

The ova are shaped like an elongated barrel, the length being about three times the width. They are covered with both horizontal and vertical ridges forming squares. They are usually light yellow. They are laid on plants of the Milkweed family, *Gomphocarpus* being the main foodplant in East Africa.

The caterpillars differ from all others in possessing long filaments, sometimes one pair but usually two near the front of the body, and one pair on the last segment. The pupa is usually bright green, about 15mm long, with black and gold spots on it. The stumpy shape, the size, the gold spots and the lack of bumps on the surface easily identify it. It is hung from a silk pad at the tail.

M. Clifton, Entomologist,
National Museum,
Box 40658, Nairobi.

- - - - - - - - - - - - - - - - -

DO YOU KNOW THAT :- PART V.

a cray fish said to come from Louisiana, in the United States, can now be found in Lake Naivasha? This creature looks like a small lobster and is mostly of a dull dark red colour. The adult is about 15-20 cms long. In parts of the lake, like the shoreline to the left of the Lake Naivasha Hotel, it is so common that they actually touch one another. Others are found in holes, sometimes quite a distance from the water but are deep enough to reach the water-table. Occasional specimens are found on dry land. It appears to now form a large portion of the food of the Marsh Mongoose as a study of the droppings has shown. It will be interesting to see what effect this large population of crayfish will have on the lake.

the skeleton of insects (and crabs, lobsters, spiders, etc.) is on the outside? This outer covering is inelastic so that it is impossible for them to grow in the same way as other animals. They therefore shed their skins to allow them to pump themselves up, either with air or water, before the new, soft skin underneath has had a chance to harden. No adult insect can shed its skin. A common misconception is that a small fly is the young of a big fly, but it will normally be a different species.

some insects very rarely produce males? In these species the female can lay fertile eggs and the process is called parthenogenisis.Entomologists are not sure how this **is** achieved but the broods produced are all female. Parthenogenisis is found in a large number of insectfamilies, including most stick-insects, some wasps, beetles and even a few moths. It is the normal method of reproduction in aphids where the young are born.

termites invented air-conditioning? Anyone who has been to the hot areas of East Africa will have seen the termite hills with long chimneys on the top. These are for the air-conditioning of the nests. It works in this way. There are small holes at the bottom of the mound which are closed during the night and open during the day. There is an air-space between the nest and the outside shell. As the outer shell heats up, so does the air in the gap, causing a convection current, upwards, drawing in air at the holes at the bottom, working on the principle of the household fireplace. If the temperature gets too high inside the nest, the termites place water at the holes, thus cooling the air as it enters.

Do you know what causes the irritation from hairy caterpillars? The irritation is caused by the brittle hairs breaking off in the pores of the skin. Some of the hairs have small barbs on them so that they stick in more effectively. One group of caterpillars, the Egger Moths *Lasiocampidae* goes to the extent of having special patches of hairs that are brightly coloured and only seen when the caterpillar senses danger. These hairs sometimes contain poisons in their hollow shafts to make the irritation even more painful. It is safe to say that any hairy caterpillar is liable to produce a painful rash.

M. Clifton, Entomologist,
National Museum,
Box 41658, Nairobi.

- - - - - - - - - - - - - -

SOME NOTES ON FIVE SPECIES OF CHAMELEON KEPT IN CAPTIVITY AT NAIROBI

East Africa is rich in species of chameleon but little is known about their biology (see Kenya National Museum's Handbook). It may therefore be worth recording some of the observations we made on the behaviour of altogether ten chameleons belonging to five species which we kept in captivity for periods during a recent seven months' stay in Nairobi. The species were *Chamaeleo dilepis* from near Sultan Hamud, *C. gracilis* from near Namanga, *C. hoeneli* from Timboroa, *C. jacksoni* from Nairobi and an unidentified species from Uganda.

FOOD: They are fed every day, mainly on grass hoppers (including large *Cyrtacanthacis* sp.) and flies but they would accept a wide variety of other arthropods including millipedes, spiders, caterpillars, winged termites (*Odontotermes* sp. but not soldiers or workers), butterflies and moths: *C. hoeneli* also accepted honey bees.

DRINK: All seemed to need water frequently. They drank from drops on leaves or from a running tap and *C. dilepis* would drink from a bowl of water.

SLEEP: All species slept every night adopting a standard position with eyes shut and tail coiled spirally; they became quite dark in colour. Sleep commenced between 5 and 6 p.m. and ended between 8 and 9 a.m. depending on the weather.

THREAT BEHAVIOUR: Threat behaviour consists of expanding the body, turning black, opening the mouth and sometimes hissing like a snake. After a few days' handling, chameleons no longer threaten their keepers. Similar behaviour appears when another chameleon is sighted a metre or so away: the chameleon may be of the same or another species. The response was particularly strong in a pregnant female *C. dilepis*, where it was accompanied by expansion of the throat and the display of orange stripes.

TEMPERATURE CONTROL: In sunlight all species at times present the maximum body surface to the rays by flattening themselves, and they become dark. This behaviour is particularly well seen in the early morning and after periods of dull weather.

REPRODUCTIVE BEHAVIOUR: Mating was witnessed on 21st March between a male and female *C. dilepis* on the back seat of our car. The individuals had been picked off the main Mombasa road near Sultan Hamud a few minutes previously. The male swiftly climbed on the back of the female and copulation lasted less than two minutes. Thereafter the female threatened males when they approached. Judging from the number of crushed corpses on the road, many chameleons are on the move at that time of the year. One day after mating the female moulted and ate her cast skin. For the next few weeks she fed prodigiously and grew very fat until on 11th May 36 eggs were laid. On 10th May she started digging in some sand provided in a bucket and by the 11th she had reached the bottom through 18 cm and would probably have gone much deeper had it been possible. She dug a tunnel using fore and hind legs and made a wider chamber at the end in which she could turn round. The tunnel collapsed behind her and she remained concealed for one night when she laid the eggs. Two days were then spent in returning to the surface and burying the eggs by carefully patting sand on top of them and butting it into place with her head. When the operation was completed she was very dirty and her fore claws were completely worn down; she seemed very weak. She recommenced feeding, moulted again and soon regained her strength. To date (4th September) the eggs have not hatched.

Clare (11) and Edward (9) Miller,
68, Blenheim Drive,
Oxford, England.

A NEW GULL FOR KENYA - *LARUS ICHTHYAETUS?*

On 14th July, 1973 at the mouth of the Nderit River at the southern end of Lake Nakuru National Park, I noticed two large slender necked gulls among a group of Grey-headed Gulls *Larus cirrocephalus* and a few Black-headed Gulls *Larus ridibundus*.

These two birds were in rather scruffy, immature plumage but it was quite clear that they were of the Black-headed Gull type, but on a much larger scale. A mottled grey-brown head indicated the birds would eventually have a similar head pattern to the more familiar *Larus ridibundus* of which there were a few in full summer plumage nearby.

The most striking feature of these two gulls was their rather long slender necks when standing upright, and their large heavy yellowish bills. Body size was large, I would say certainly comparable to that of a Lesser Black-backed Gull *Larus fuscus*.

Although I have never seen a Great Black-headed Gull *Larus ichthyaetus*, I immediately felt reasonably confident that these two birds were of this species mainly due to a process of elimination of all other possibilities. (I now understand that Dr. George Watson of the Smithsonian Institution agrees with my diagnosis.)

In addition to these birds, I also counted some thirty dead White Pelicans *Pelecanus onocrotalus* littering the shore of the lake at the mouth of the Nderit River. One living Pelican was very near its end, being hardly able to walk, merely stumbling a few metres when disturbed. Can anyone throw any light on the cause of death of these Pelicans?

D.A. Turner,
Box 48019, Nairobi.

A RECENT BREEDING RECORD OF SKIMMERS *RYNCHOPS FLAVIROSTRIS* - TANZANIA

In the course of collecting information for a paper on the breeding Lari of East Africa, P.L. Britton asked me if I had any recent information on Skimmers breeding in Tanzania. Britton's paper is in press and I will only anticipate it to say that there are very few published records for this country and all of those refer to sandbanks in rivers in the south. Skimmers have often been recorded on the great sandbanks of the Rufiji River, e.g. near Utete, but as far as I know there are no breeding records for this river.

Following up Britton's request for information I visited the Rufiji at Utete on 20th August, 1972. Large sandbanks had been exposed for over ten weeks and saw only two skimmers (both adults and apparently a pair) but no sign of breeding. It is possible that I was too late.

On 23rd June, 1973 I again visited Utete with R. Gainer of the Selous Game Reserve. The rains were very late this year and although the sandbanks were appearing and the water level dropping at the rate of 1-1½m a day we were probably rather early for most sandbank breeding birds. However, we quickly found nine Skimmers on a small sandbank well out near the main stream of the river. With the aid of two local fishermen and a very efficient dugout canoe we made our way to this sandbank. After a short search we found eight round hollows in the sand from which Skimmers had been flushed. Six of the hollows were empty but one contained one egg and another two eggs. The eggs were large and oval shaped with buffish ground colour irregularly blotched with purple and dark brown. They were very like large terns' eggs. The nest hollows were about 50 mm deep with straight sides and with a diameter of 150-170 mm. They were in fairly firm sand and had no lining although the sand in the bottom was soft and fine. While examining these hollows we were constantly mobbed by the screaming birds. It is possible that the other six hollows were future nests as they were within 20 m of the occupied nests. If so there must have been other Skimmers in the area, which we did not see.

Incidentally, among the other species of birds on these sandbanks were at least a hundred Pratincoles *Glareola pratincola*. They were in pairs and behaved as if they were breeding on a flat area of recently dried out sand. An extensive search was fruitless, but we were probably a few days too early to find eggs.

W.G. Harvey,
Box 9100, Dar es Salaam.

ON THE WINTERING OF THE SPROSSER *LUSCINIA LUSCINIA* AND THE MARSH WARBLER *ACROCEPHALUS PALUSTRIS* IN KENYA

There are a number of Kenyan Sprosser and Marsh Warbler specimens in collections dated November and December. On the basis of these, Kenya has been included in the wintering range given for the two species by Vaurie, White and Moreau (1972 *The Palaearctic-African Bird Migration Systems*, London: Academic Press). We now know, from ringing studies, that both occur as passage migrants around Nairobi in late autumn and less frequently in April, and both have recently been found to be extremely abundant on southward passage through Tsavo between late November and early January (Pearson & Backhurst, in prep.). Most past Kenyan records of these species, many of them from the early winter months, evidently refer to birds on migration from an autumn non-breeding area farther north (presumably in eastern Ethiopia) to late winter quarters in Southeast Africa (Natal - Tanzania). Until very recently, there was no evidence that Marsh Warblers remained throughout the winter as far north as Kenya, and apart from a specimen in the National Museum, Nairobi, from the Chyulu Hills, dated 27th January, there was no available evidence of overwintering in the Sprosser either. The following observations from the Kibwesi/Mtito Andei area, S.E. Kenya, are therefore of interest.

On 14th January, 1973 *Luscinia* song was heard in a damp wooded hollow with dense green undergrowth 5km west of Mtito Andei. Brief views of some of the birds concerned proved them to be Sprossers. Small, unstreaked *Acrocephalus* warblers seen and heard calling (but not singing as Reed Warblers *A. scirpaceus* frequently do at this time) were thought to be Marsh Warblers. Investigation of other patches of similar habitat a few kilometres farther west revealed the presence of more Sprossers, singing and apparently resident.

To ascertain that these really *were* wintering birds, another visit was made to the same area on 11th/12th February. Singing Sprossers were found again and appeared to be quite common in most wooded hollows and river courses near Kibwesi and Mtito Andei. Small unstreaked *Acrocephalus* sp. were again seen; none was in song, and most were in the early stages of wing moult, and this together with the uniformly greenish plumage tone of all birds seen closely was considered confirmation that these were indeed Marsh Warblers (most Kenyan wintering Reed Warblers moult before arrival; a few begin in December and January). On the same weekend, a moulting Marsh Warbler was caught and two *Luscinia* sp. (assumed to be Sprossers) were heard at Ngulia, Tsavo National Park (West). Other migrant passerines of interest seen in the area during the weekend included single Basra Reed Warblers *A. griseldis*, one at the original Sprosser site and one along a dry water course just west of Mtito Andei, and two Golden Orioles *Oriolus oriolus*.

It therefore seems that the late winter quarters of the Sprosser and the Marsh Warbler do extend north as far as the southeast corner of Kenya, not surprising perhaps in view of the southern African type of rainfall regime experienced by this area. It remains to be established whether these species overwinter in suitably wooded areas farther north in eastern Kenya, such as the Tana River valley.

D.J. Pearson,
Box 30197, Nairobi.

CAMP ON MR. C.H. MAYERS' FARM, KEDONG, 14-16 SEPTEMBER

This was another very successful camp and we are most grateful to Mr. and Mrs. Mayers for their invitation. We could see rain on the Western escarpment, but this part of the Rift Valley was very dry, and there was no water flowing in the river by which we camped; only occasional pools. However, the bushes and trees along the banks were full of Black-breasted Apalis *Apalis flavida* and Grey-backed Camaroptera *C. brevicaudata*. Many of the thorn trees were in flower and were alive with Sunbirds, and the Banded Tit-flycatcher *Parisoma bohmi* was singing everywhere.

One or two of the birds we saw remain especially in my mind. Foremost perhaps are the White-fronted Bee-eaters *Melittophagus bullockoides* hawking in the Mayers' garden and catching butterflies. The garden with its thick turf, running river and sprinklers is a green oasis in the brown land. The White-throated Bee-eater *Merops albicollis* was seen near the Grenadilla plantation. The Scaly-throated Honey-guide *Indicator variegatus* gave us a lot of fun. There were several along our dry river bed calling from the tops of Acacias. The last time I had seen one was on our camp on the Wei-wei two years ago, where we also saw a young bird being fed by a Nubian Woodpecker *Campethera nubica*, but I had not learnt the call and this perpetual churring puzzled us greatly until at last we saw the bird, recognised that it was a Honey-guide and looked up the call. They seemed to have very small territories and to stay more or less in the same place. Another puzzling bird that was very conspicuous was the Red-backed Scrub-robin *Cercotrichas leucophrys*, which was singing all around. It is worth noting that the subspecies that we see round here, *C.l. brunneiceps*, has much more white on the wing than the one illustrated in Praed & Grant's plate. Compare the Photograph Ph.x. A Black Cuckoo-shrike *Campephaga sulphurata* with yellow shoulder patches was living in a tree at the end of the camp site, and was I think seen and enjoyed by everyone.

I must end as I began with many thanks to Mr. & Mrs. Mayers for providing this delightful weekend.

P.M.A.

- - - - - - - - - - - - - - -

JOURNALS

A new list of Journals and reprints for sale is enclosed with this Bulletin. The last list was made by a volunteer, Mrs. E. Darlington, in February, 1970 and brought in quite an amount of money for the Society.

At the last Annual General Meeting, the Hon. Treasurer noted that there had been a falling off in receipts from this source. Now another volunteer has made a new list (it really is a major operation and we owe her many thanks) and we hope that this will renew interest in our back numbers.

Please bring it to the notice of anyone likely to be interested. Further copies can be obtained from the Librarian at the Museum.

- - - - - - - - - - - - - - -

PANDANUS 'EMBUENSIS' (ST. JOHN INED.)
AN INTERESTING 'SCREW PINE' IN NEED OF PRESERVATION

Pandanus 'embuensis' was first discovered in 1961 by Prof. H. St. John of Hawaii, the well-known expert on this widespread tropical genus of curious and useful palm-like trees, Prof. St. John intends to describe it formally as soon as finance and pressure of other work permit. It is the only species known from the interior of Kenya, although *P. kirkii* Rendle and *P. rabaiensis* Rendle are not uncommon near the coast.

P. 'embuensis' is a curiously shaped dioecious tree with stilt roots about 2m tall, rod like prickly stems 10-13 m tall, short horizontal forking branches ending in tufts of narrow saw-toothed leaves, beautiful white clusters of fragrant male flowers appearing at the end of August and cone like fruits which are immature in October. Its embu name is MURIRA.

Prof. St. John's single locality is on the Ena River some 25 km east of Embu at 1050 m altitude. In 1970 Mr. R.B. Faden found a small colony on an island in the Thika river at 37° 26' E, 1170 m altitude. This year the present writer found several groves on islands in the Tana River at 840 m at Seven Forks about 1 km above the head of the lake formed by Kindaruma dam and several kilometres east of the new dam now being built at Kamburu bridge. The south bank opposite these islands is readily reached by a track leading to the pump which supplies the Kindaruma staff houses with water. The *Pandanus* is associated with *Raphia* and *Phoenix* palms and with various interesting water-loving trees and shrubs including *Polysphaeria* sp.? new *Excoecaria venenifera*, *Adina microcephala*, *Baphia keniensis*, *Craibia brevicaudata* and *Sorindeia madagascariensis*. Perhaps because some animal which does not readily cross rivers eats the young plants the *Pandanus* is confined to the islands, which are rather inaccessible, since the water between them and the south bank, even when the river is low, is rapid, over 1m deep and contains crocodiles.

In both the Ena River and the Thika River localities the species is in danger as the local cultivators cut it for poles. There are no cultivators at Seven Forks but this colony will be wiped out within a few years as the Kenya Government, in a very necessary attempt to minimise the approaching energy famine, is certain, sooner or later, and preferably sooner, to build a third hydro-electric dam just above Seven Forks, between it and Kamburu. This dam, except in times of flood, will divert the whole stream at Seven Forks into a tunnel, and the water-loving plants there will die.

It is to be hoped that some reader of these notes who owns, or is in charge of a large garden below 2000m above sea level in which there is a permanent stream, will establish both male and female trees in cultivation and thus save this attractive Kenya endemic from extinction. Nothing is known of its propagation but Bailey's standard Cyclopedia of Horticulture and the R.H.S. Dictionary of Gardening state that some species of *Pandanus* may be reproduced by seed, which must be fresh, and most by suckers produced near the base of the stems. It is expected that the new dam at Kamburu will be filled during the short rains in November or December, 1973. At that time the river will be reduced to an unusually low level and the islands at Seven Forks should be more accessible than at any other time.

J.B. Gillett, E.A. Herbarium,
Box 45166, Nairobi.

BOOK REVIEW

THE PRINCIPLES OF INSECT PHYSIOLOGY by V.B. Wigglesworth
(Seventh edition). Published by Chapman and Hall
in the low-priced edition. U.K. price £2.50

This is the classic work on the physiology of insects and it is very pleasing to see it in the low-priced text-book series. There are fifteen chapters, each followed by its own set of references (5470 references in all) and it is a pity that the notes on the more recent findings are included after the chapter concerned instead of in it. The references are laid out similarly, but three supplements to the main body of them is both unwieldy to use and also a source of annoyance. Other than these, admittedly minor difficulties, the book is very good.

The chapters deal with every aspect of insect physiology and include embryology, the outer surface of the insect, growth, muscle systems, nervous and gland systems, sense organs, behaviour, respiration, circulatory system, digestion, excretion, metabolism, water and temperature, and the reproductive system. All these subjects are gone into in exhaustive detail in the 763 pages of text and it is complete up to the end of 1971.

A useful part of the book, which covers pages 765 - 793 gives an alphabetical list of the authors used in the references with the page where these references are to be found.

This book has always been one of those which should be on the book-shelf of every entomologist but it has hitherto been too expensive for most of them. This low-priced edition should be the remedy.

M.P.C.

SOME RECENT PERIODIC LITERATURE AVAILABLE IN THE LIBRARY

Ash, J.S. - *Luscinia megarhynchos* and *L. luscinia* in Ethiopia. *Ibis*, 115, 267, 1973.

Contant, E.B. - Regeneration in the African Lungfish *Protopterus*. 3. Regeneration during fasting & estivation. *Biol.Bull.* 144,248,1973.

Gargett, V. & L.H. Brown - Replacement rate, subadult mortality and longevity. *Ibis*, 115, 285, 1973.

Goddard, J. - The Black Rhinoceros. *Nat.Hist.N.Y.* 82, No.4, p.58, 1973

Klaver, C.J.J. - Lung anatomy: aid in Chameleon taxonomy. *Beaufortia*, 20, No. 269, 1973.

Linnavuori, R. - On the African Herdoniini *Hem.Het.Miridae, Mirinae* *Ent.Tidskrift*, 93, 137, 1973.

Mabberley, D.J. - Evolution in the Giant Groundsels. *Kew Bull.* 28,61, 1973.

Verdcourt, B. - Miss D. Napper. *Kew Bull.* 28, 1, 1973

SOCIETY FUNCTIONS

6th/7th October, 1973: Week-end camp at northern end of the Chyulu Hills. For full details please see September issue of the Bulletin.

Monday, 8th October, 1973: at the National Museum Hall, Nairobi "Natural History Observations during the Eclipse" by members of the National Museum Expedition to Lake Rudolf during the Eclipse.

3rd/4th November, 1973: Week-end camp at the "Marina", Lake Naivasha. Special rates have been offered to the Society for this week-end. Full board in cottages Shs.60/= per person. Do-it-yourself cottages Shs.50/= double. Camping Shs.12/50 per tent per night (no limitation on numbers of people). Visit will be arranged to Crescent island.

If you wish to take part in this excursion please send full payment by crossed cheque, made out to Naivasha Marina and post it to Mrs. A.L. Campbell, Box 14469, Nairobi before 25th October, 1973.

Monday, 12th November, 1973 at 5.15 p.m.: at the National Museum Hall, Nairobi. Mr. John Cooper, M.R.C.V.S. will speak on the care and treatment of injured wild mammals and birds.

8th/9th December, 1973: Visit to Ngoina Estate, Kisii District. Leaders - Mr. and Mrs. L.A.S. Grumbley. Details later.

Monday, 10th December, 1973 at 5.15 p.m.: at the National Museum Hall, Nairobi. Mrs. J. Rudnai will speak on "Lion Behaviour".

- - - - - - - - - - - - - - -

NEW MEMBERS - SEPTEMBER 1973

Full Members:

Mrs. June Bapp, Box 30259, Nairobi.

Dr. C.H.D. Clarke, Box 3134, Arusha.

Mr. J.C. Haigh, Box 291, Nanyuki.

Miss Julia Horne, Box 24622, Karen.

Mr. Thomas R. Huels, Bushwhackers, Kibwezi.

Miss Ingerborg Karlgard, Box 41081, Nairobi.

Mrs. Anneli Lewis, Box 30024, Nairobi.

Miss Valerie Martin, St. Mary's School, Yala, Nyanza.

Mrs. G.E.L. Nicholson, Box 5, Malindi.

Mr. Thomas J. O'Shea, Bushwhackers, Kibwezi.

Mr. M.T. Warwick, Box 30486, Nairobi

- - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings.

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN NOVEMBER 1973

CONTENTS

Broad-billed Sandpipers on the Kenya Coast 146
A Record of the Bat 147
Correction to "Contents" Page, October issue 147
A Note on the Nectar of *Acrocarpus Fraxinifolius* and Sunbirds 148
Obituary - Miss Mary Rickman 151
News from the Library 152
Help Needed 152
Letters to the Editor 153
New Members 153
Membership Subscriptions for 1974 154
Society Functions 154

BROAD-BILLED SANDPIPERS ON THE KENYA COAST

In recent years the Broad-billed Sandpiper *Limicola falcinellus* has been recorded in all three East African countries, both inland and at the coast (Backhurst *et al.* 1973, Harvey 1971, Hopson & Hopson 1972, 1973). Prior to 1961 this Palearctic migrant was unrecorded in eastern Africa south of Eritrea, and the main wintering area of birds breeding in northern Europe is still unknown. It is mainly recorded south and south-east of its breeding area, as far afield as East Africa and Sri Lanka (Ceylon); an eastern population, breeding in Siberia, winters from south-east Asia to Australia.

On 5th August, 1973 we found three Broad-billed Sandpipers at the mouth of the Sabaki (Galana) River near Malindi on the north Kenya coast. Like Harvey's bird, near Dar es Salaam, on 2nd August 1971, they were in complete or virtually complete nuptial dress and had presumably only recently arrived from their breeding grounds. In this plumage they were unexpectedly distinct, being dark chocolate brown above with pale buff areas, which, together with the pure white belly, gave them an almost pied appearance.

They were considerably smaller than nearby Sanderling *Calidris alba* and Curlew Sandpipers *C, ferruginea*, and were probably a little larger than a Little Stint *C, minuta*, although this species was not present for comparison. The legs appeared very short and the bill was rather heavy with a decurved tip; bill and legs were black. The virtually white superciliary stripe was very obvious but the snipe-like crown markings were less distinct than implied by most texts. One bird did not feed and had a persistent habit of swaying its body while facing backwards, bill on mantle. In this position the head stripes were obvious. No call was heard, but all three birds were distinct in flight with two pale buffish longitudinal areas on the mantle. They were watched for about 25 minutes at ranges down to 12-15m.

When the next visit was made on 13th August, there were nine Broad-billed Sandpipers feeding in a loose flock on the same tidal flats near the river mouth. These were less distinct than the earlier birds, being far more greyish above, though still retaining some dark areas. If the same birds were involved as part of this flock their moult to winter dress must have been rapid. In this and later plumages they might at first be confused with Dunlin *C. alpina*, but the shorter legs and the head markings (if looked for) are good characters; and the Dunlin is anyway hardly known from East Africa (Backhurst *et al.* 1973).

No Broad-billed Sandpipers were seen at the Sabaki River mouth on two subsequent visits (27th August and 16th September). The only previous Kenya record is of up to ten seen by the Hopsons at Lake Rudolf in September-October, 1972.

Peter L. Britton & Hazel A. Britton,
Box 90163, Mombasa.

REFERENCES:

Backhurst, G.C., Britton, P.L. & Mann, C.F. (1973). The less common Palearctic migrant birds of Kenya and Tanzania. *Jl E. Afr. Nat. Hist. Soc. Nat. Mus.* 141 : 1-38.

Harvey, W.G. (1971). The second Broad-billed Sandpiper for Tanzania. *EANHS Bull.* 1971 : 161.

Hopson, J. & Hopson T. (1972). Broad-billed Sandpiper at Lake Rudolf. *EANHS Bull.* 1972 : 170-171.

Hopson, T & Hospon, J. (1973). More Broad-billed Sandpipers at Lake Rudolf. *EANHS Bull.* 1973 : 52.

- - - - - - - - - - - - - - - -

A RECORD OF THE BAT *SCOTOECUS HINDEI HINDEI* (*VESPERTILIONIDAE*) *FROM TANZANIA*

In December, 1972 a young adult male *Scoteocus h. hindei* preserved in formalin was sent to me from Dodoma. The bat had the following measurements in millimetres, *ex* formalin: total length 87; length of forearm 35.2; length of tail 25; length of hindfoot (*cu*) 6; length of ear from notch 9; length of tragus 4. This specimen, which was sent to me by Mr. M.K. Green, appears to be the first definite record of the species in Tanzania.

Mr. J.E. Hill of the British Museum (Natural History) who kindly identified the specimen, informs me that although there is a manuscript note in the British Museum's copy of Swynnerton and Hayman's "A Checklist of the land mammals of the Tanganyika Territory and Zanzibar Protectorate" (1951 *Jl..E. Africa Nat. Hist. Soc.* 20: 274-392) of "a specimen from Lake Mangona in the collections of the BM", such a specimen cannot now be found. The Dodoma specimen is catalogued in the British Museum as B.M.73.27.

K.M. Howell,
Dept. of Zoology,
University of Dar es Salaam,
Box 35064, Dar es Salaam, Tanzania.

- - - - - - - - - - - - - - - -

CORRECTION

Bulletin 1973: 133. Apologies for putting the wrong date on the "Contents" page of the last issue. This should be October and not September. An amended, replacement "Contents" page is being sent out with this issue.

- - - - - - - - - - - - - - - -

A NOTE ON THE NECTAR OF *ACROCARPUS FRAXINIFOLIUS* AND SUNBIRDS

During the course of a study of the nectar taking methods employed by sunbirds (Nectariniidae) samples of flowers of an introduced Australian species of tree, the "Shingle tree" *Acrocarpus fraxinifolius* (Leguminosae: Caesalpinoidea), were examined to ascertain the nectar volume per flower and to test for sugar types and the percentage of sugar in the nectar.

The trees can grow to a considerable size and the original samples available were rather tall trees so that the first flowers to be examined were those found fallen on the ground. An astonishingly high sugar content of the nectar was recorded on the refractometer i.e. 58% sugar. The highest percentage recorded to date from over 90 different species of flowers examined.

The high figure gave rise to doubts that maybe sugars in fermenting nectar of old flowers may have been misleading as to the actual sugar content in living blossoms. Fresh samples were eventually obtained when surprising differences in nectar volume and sugar content were found. The yield of nectar from flowers increases from the time of opening and release of pollen so the figures in the accompanying table reveal that the older the flower and its nectar, the higher the sugar percentage. The oldest flower with a nectar content of 52% and the youngest at 11 to 12% sugar.

The flowers are not ephemeral but remain on the inflorescence for several days, thus the oldest flowers contain the greatest volume of nectar. The volume is measured in microlitres or lambdas (1000 microlitres to 1 millilitre) and is extracted readily by means of a fine capillary so that accurate measurements can be achieved.

The example given in Table I is for each flower from a single inflorescence commencing at the first or basal flower and working, flower by flower, in order, up to the apex which consists of immature flowers, still buds without external protruding stamens. Flowers mature more or less evenly in succession from the base to the apex. Of additional interest is the flowers' ability to replenish nectar taken (by birds, etc.). Two inflorescences were examined and all nectar removed and measured from selected flowers, old near the base and one/two day old flowers about midway along the raceme. Results are shown in Table II, A being of 10 basal flowers with nectar removed at 15.00 hours and the volume found 17.5 hours later; B similarly, of 20 random flowers. The two inflorescences were kept overnight standing in water. It is thus probable that on a living uninjured branch nectar replenishment could be even greater.

TABLE I

NECTAR, VOLUME IN LAMBDAS AND SUGAR PERCENTAGE, OF FLOWERS ON A SINGLE INFLORESCENCE OF *A. FRAXINIFOLIUS*

Flower	Lambdas	Sugar %	Flower	Lambdas	Sugar %
1	45.72	52	34	24.41	14.4
2	12.97	x	35	79.20	18.6
3	33.99	49.5	36	43.56	12.6
4	42.64	41.8	37	4.63	x
5	38.31	42.2	38	67.98	23.0

Flower	Lambdas	Sugar %	Flower	Lambdas	Sugar %
6	71.07	31.0	39	60.32	13.0
7	43.56	38.0	40	3.39	x
8	67.36	28.6	41	25.33	16.4
9	79.10	31.8	42	38.31	12.8
10	71.68	33.8	43	79.10	16.4
11	68.59	30.2	44	68.83	14.0
12	67.67	36.8	45	39.55	17.4
13	80.34	30.2	46	0.92	x
14	80.64	25.6	47	25.33	13.2
15	66.43	28.0	48	72.61	13.8
16	68.59	26.0	49	0	x
17	80.75	20.4	50	30.90	13.0
18	39.55	21.4	51	0	x
19	68.90	15.4	52	0	x
20	30.36	15.4	53	21.63	12.0
21	79.10	20.0	54	0	x
22	70.45	14.4	55	29.35	12.0
23	36.15	16.2	56	0	x
24	92.70	15.8	57	0	x
25	68.83	13.8	58	19.77	14.0
26	27.18	16.4	59	0	x
27	32.44	11.0	60	2.78	x
28	77.25	15.0	61	2.47	x
29	19.77	13.0	62	0	x
30	81.26	25.4	63	7.10	x
31	62.10	13.4	64	0	x
32	52.22	25.0	65	0	x
33	35.84	12.4	66	0	x

TOTAL 66 open or opening flowers plus 16 buds. Total 82.
Measured with nectar 57
Total nectar 2667.48 lambdas
Mean of 57 46.80 lambdas
Maximum percent sugar 52.0%
Minimum 11.0%
Sugar percent Mean 21.6% (48 flowers)
x = insufficient nectar to obtain refractometer reading.

TABLE II

NECTAR REMOVED AND VOLUME REPLENISHED AFTER 17.5 HOURS, PER FLOWER, IN MICROLITRES

A. 20 RANDOM FLOWERS

No.	removed	replenished
1	0	0
2	0	0
3	0.2	0.6
4	0	0
5	0	0
6	0	0
7	0	0
8	3.6	11.12
9	0	0
10	0	0
11	2.3	7.10
12	0	0
13	4.0	12.36
14	0	0
15	1.5	4.63
16	0	0
17	0	0
18	0.4	1.23
19	1.2	3.70
20	4.5	13.90

B. 10 SELECTED BASAL FLOWERS

No.	removed	replenished (lambdas)
1	1.1	3.39
2	2.7	8.32
3	5.7	17.61
4	4.2	12.97
5	0	0
6	3.0	9.27
7	0	0
8	2.7	8.32
9	0	0
10	0.2	0.60

NOTE: All these flowers had had their nectar extracted during the course of the morning. The amount extracted was in the flowers at 15.30 hours and replenished nectar was removed at 08.30 hours the next day.

Many non-ephemeral species of flowers can replenish their nectar as the present study has revealed, and one good example is Sisal *Agave sisalana*, whose nectar is much appreciated by birds. *Acrocarpus fraxinifolius* is thus an important nectar source for sunbirds and insects, particularly Hymenoptera (bees, wasps, hornets, etc.) and Diptera (flies of many kinds).

A small plantation of the trees in the Forest department opposite my residence at Karen is alive with birds and insects, particularly honey bees (15.6.73). The following species of sunbirds have been recorded taking nectar:

Collared Sunbird	*Anthreptes collaris*	Golden-winged	*N. reichenowi*
Amethyst "	*Nectarinia amethystina*	Eastern double-collared	*N. mediocris*
Malachite "	*N. famosa*	Scarlet-chested	*N. senegalensis*
Hunter's "	*N. hunteri*	Tacazze	*N. tacazze*
Bronze "	*N. kilimensis*	Variable	*N. venusta*

ACKNOWLEDGEMENTS: Special thanks to Dr. Frank Gill for the provision of the refractometer and other equipment for the study.

C.R. Cunningham-van Someren,
Box 24947, Karen.

OBITUARY

MISS MARY RICKMAN, a member of the Society since 1952, died on 23rd August aged 87, after a stay in Nairobi Hospital of just over 2 years following a stroke. She was an English gentlewoman in the best sense of the word, a breed that is now practically extinct. Brought up partly in London and partly in the country, country pursuits were a permanent interest in her life, and she also had all a gentlewoman's sense of responsibility for her poorer neighbours, including her less fortunate fellow subjects in what was then the colonial empire. During the first world war she worked in Woolwich Arsenal and the Foreign Office. It was here that she earned her M.B.E., and it is good to know that part of the expense of her long stay in hospital was defrayed by a grant from St. George's Society, which has funds especially to help those who worked for England.

She came out to this country in 1928 under the Church Missionary Society, and spent the rest of her life conveying to this country what she considered of universal and permanent value in the heritage of the West. A woman of cultivated tastes and wide interests, she had none of the narrow and gloomy outlook which I am afraid some of us have come to associate with her profession. Her work was mainly in the field of education and she was a pioneer of women's education at a time when there was much prejudice against sending girls to school. Working in the Kikuyu country she travelled about first on mule-back and later in a car which her friend and colleague, Miss Edith Wiseman, learnt to drive, and many are the now prominent citizens whom she knew in their early days of struggle in rural schools.

Among her other hobbies, she worked the tapestry of Upper Kabete in the series now in the Parliament Building. It was designed by Miss Wiseman and worked by Miss Rickman and took a year and a half to complete. Birds and flowers of the district are worked into the border round the frame.

Her last illness was rather long and tedious. She gradually seemed to become weaker and smaller, but her mind remained clear and strong. She finally passed away at 2.00 a.m. at a time when the vital spirits are at their lowest. But a convinced and practising Christian, this dissolution held no terrors for her, and she was never a depressing person to visit. She always encouraged me to tell her about the activities of the Society and what birds I had seen. I remember telling her about our trip to Lake Rudolf to see the eclipse, and in a sudden fit of detachment seeing myself chatting away, pouring it all out, as to a sympathetic and interested listener, not to a dying woman. We cannot regret her death, as it was due: but I miss my visits to her.

P.M.A.

NEWS FROM THE LIBRARY

1. CORYNDON MUSEUM EXPEDITION TO THE CHYULUS, 1938:

Members who went on the recent week-end camp may be intested to know that the reports of the 1938 expedition were published in our Journal in ten parts over a number of years. They are:

Part 1.	Van Someren	- General Narrative
Part 2.	Van Someren	- Birds
Part 3.	Van Someren	- Butterflies
Part 4.	Van Someren	- Reptiles & Amphibia
Part 5.	Peter Bally	- Notes on the Vegetation
Part 6.	A.F.J. Gedye	- Coleoptera pt. 1
Part 7.	G. Marshall	- Coleoptera pt. 2
Part 8.	B.P. Uvarov	- Grasshoppers
Part 9.	W.D. Hincks	- Dermaptera (earwigs)
Part 10.	A.F.J. Gedye	- Coleoptera pt. 3

Of these No. 3, 4, 6, 7, 9, & 10 are still available for sale. All of course are available in the Library.

2. THE SLUG, THE GARDENER'S FRIEND:

While sorting some reprints the other day I came on an article by our former Chairman, Dr. Malcolm Coe, on "The activity of the slug *Trichotoxon copleyi copleyi* Verdcourt" (which bears the names of two other members of the Society). It is no doubt the fat white slug which appears with the rains and which most of us detest. Dr. Coe marked 33 specimens and followed their movements. He writes, "At no time was a slug observed feeding on green material. The preferred diet seemed to be dead vegetable material usually in the form of small twigs, or other more or less elongated pieces of dead plant tissue... There is little doubt in the highlands of Kenya that slugs form an important link in the invertebrate decomposer chain." (*E. Afr. Wildlife Journal* Vol. 9, p.170, 1971).

There are possibly other molluscs which the gardener does well to hate, but it is something to be thankful for if we can spare ourselves the particularly revolting task of killing these (we now know) amiable creatures.

P.M. Allen.

HELP NEEDED

The Librarian would be very grateful for the help of any member who could come in for (say) one morning a week and help with odd jobs. Also additions are needed to the panel of people willing to come and help with the Bulletin, usually during the last week of the month. It is quite impossible to get the Bulletin out on time without such help and the whole Society should be grateful to those who volunteer.

P.M.A.

LETTERS TO THE EDITOR

Sir,

THE C.J.P. IONIDES MEMORIAL FUND

The above Fund was launched in February of this year in order to erect a Memorial to the late C.J.P. Ionides, the well-known herpetologise and naturalist.

A considerable number of donations have already been received and preliminary plans are now under way to build a suitable Memorial Cage at the Nairobi Snake Park. Details of the project will be published in due course.

The purpose of this letter is to announce that the Appeal will close on 1st December, 1973. All those who wish to donate, and have not done so, should forward their contributions before that date.

We should like to thank all those who have contributed to this Fund so far.

J.H.E. Leakey, Lake Baringo, Box 1141, Nakuru, Kenya
J.E. Cooper, c/o Veterinary Services Division, P.O. Kabete, Kenya
C.R.S. Pitman, Leicester Court Hotel, 41 Queen's Gate Gardens, London
A. Duff-Mackay, The National Museum, Box 40658, Nairobi, Kenya
Marianne Mitton, 16 Bailleul Road, Delville, Germiston, South Africa.

- - - - - - - - - - - - - - -

NEW MEMBERS FOR SEPTEMBER / OCTOBER 1973

Full Members

Mr. F. Carlier, Box 30262, Nairobi
Mr. Robert A. Cox, UNESCO Project, Faculty of Education, University of East Africa.
Mr. & Mrs. J.C. Edwards, British High Commission, Box 30465, Nairobi
Mr. Michael J.S. Goddard, Nyandarua Secondary School, Box 61, Ol Kalou
Miss Johanna Hundertmark, German Embassy, Box 30180, Nairobi
Mrs. B. Lang, Box 14319, Nairobi
Mr. David T.E. Lloyd-Jones, Box 30100, Nairobi
Miss Joan T. Macdonald, Box 14167, Nairobi
Miss D. Wester, Netherlands Embassy, Box 41537, Nairobi

Student Members:

Mr. H.K. Bhatia, Box 10269, Nairobi
Miss Yasmin Kassam, Box 45387, Nairobi
Miss Elizabeth Ngure, Box 30197, Dept. of Zoology, Nairobi.

- - - - - - - - - - - - - - -

MEMBERSHIP SUBSCRIPTIONS FOR 1974

[illegible] from subscriptions, which has mounted steadily for the last three years, will show a distinct drop for the year 1973. This is particularly unfortunate in view of the rate at which the costs of printing and despatching the Bulletin and Journal have risen in recent months. While your Executive Committee is keeping a very close eye on the situation I am asking for your help towards resolving this problem. How?

1. PAY YOUR SUBSCRIPTIONS PROMPTLY: Renewals for next year will be due on 1st January, 1974. Please make a note to pay your Shs. 50/= (full member) or Shs. 10/= (student member) promptly after that date. Payment can be made by cheque, cash or by Bankers' Order. This last method is very convenient. Will members already paying by Bankers' Order make sure that the correct amount of Shs. 50/= is paid. We still receive some payments of Shs. 30/= although subscriptions went up over four years ago. Defaulters will receive a last reminder with the February issue (posted at the end of January) of the Bulletin. After that they will not receive any publications or notices of functions.

2. ENROL A NEW MEMBER: You know what the Society provides and what good value it is. Please persuade your friends to join. A 20% increase in membership would solve our financial problems.

3. PUBLICIZE THE SOCIETY: This is directly connected with increase in membership. I am continuously surprised to learn from people out here for a couple of years or so that they didn't learn of the Society's existence until it was too late for them to join. In view of the large turnover in our membership (nearly 30%!) the publicity is most important. Talk about the Society and its activities whenever you get an opportunity.

Please help us to help you!

John Karmali,
Chairman.

- - - - - - - - - - - - - - - -

SOCIETY FUNCTIONS

3rd/4th November 1973: Weekend Camp at "Marina", Lake Naivasha. For details please see last issue.

Monday 12th November 1973, 5.15 p.m. at National Museum Hall, Nairobi. Mr. John Cooper, M.R.C.V.S. will speak on "The Care & Treatment of injured Wild Mammals and Birds".

Saturday 24th November 1973: Miss P.M. Allen will lead a bird walk in a locality near Nariobi. Please meet at the National Museum at 2.30 p.m. and bring a picnic tea.

(7th) 8th/9th December 1973: Weekend visit to Ngoina Estate, Kisii District. Leaders- Mr. & Mrs. L.A.S. Grumbley. Distance from Nairobi - about 6000 ft. in high rainfall area. Weather in December should be dry, but no guarantee and in any case nights will be cold with heavy dew. Estate is run as a mixed farm and belongs to Brook Bond Liebig (K) Ltd. There is an interesting variation of flora in the 1.962 acres of undeveloped ground, varying from heavy forest to patchy scrubland. Fauna is fairly well represented, as are western Kenya birds. Members should be self-contained with all camping equipment, food and drinking water; firewood and washing water will be available at the camp site. Members wishing to take part in this excusion please fill in the enclosed form and return it to Mrs. A.L. Campbell, Box 14469, Nairobi not later than 28th November, when further details and route maps will be sent to you.

Monday 10th December 1973, 5.15 p.m. at the National Museum Hall, Nariobi - Mrs. J. Rudnai will speak on "Lion Behaviour".

- - - - - - - - - - - - - - - -

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J. S. Karmali
Vice Chairman: Mrs A. L. Campbell
Editor, Jl E. Africa nat. Hist. Soc. & Nat. Mus.: Dr P. J. Greenway O.B.E.
Secretary: Miss J. Ossent
Librarian and Assistant Secretary: Miss P. M. Allen
Treasurer: M. P. Clifton
Executive Committee (in addition to the above): Miss D. Angwin; G. C. Backhurst (*Ringing Organizer* and *Editor EANHS Bulletin*); A. D. Forbes-Watson (*Co-Editor Journal*); Mrs. J. Hayes; R. E. F. Leakey; E. T. Monks; C. E. Norris;
Co-opted members: Mrs H. A. Britton (*Nest Record Scheme Organizer*); A. Duff-MacKay; J. Gerhart; T. D. Morris; Mrs F. Ng'weno; Mrs A. Sparrow.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the *EANHS Bulletin* every month; a copy of each *Journal* published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers; the Society runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes a leading and highly respected scientific journal—*The Journal of the East Africa Natural History Society and National Museum.* Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated monthly magazine which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to the Editor (*EANHS Bulletin*), P.O. Box 29003, Kabete, Nairobi, Kenya. Line drawings will be considered if they add to the value of the article, photographs cannot be published.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: K shs.	500/-
Institutional (shools, libraries) . .	annual payment: K shs.	50/-
Full	annual payment: K shs.	50/-
Junior (full-time student, no *Journal* supplied)	annual payment: K shs.	10/-

Subscriptions are due 1st January. From 1st July you may join at half the yearly rate and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
SI

EANHS
BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings.

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN DECEMBER, 1973

CONTENTS

A Visit to Taveta, Lake Jipe & the Teita Hills - - - - - - - - - - - - - - 156
The Fiery-Necked Nightjar in Kenya - 158
Sight Record of Nest Making by Green-backed Herons - - - - - - - - - - - 159
Hornbills and Bats - 160
Sound Recordings - 160
Death of a Young Elephant - 161
Marina Week-End - 161
Library Notices - 162
Reviews - 163
New Members - 165
Society Functions - 166

A VISIT TO TAVETA, LAKE JIPE AND THE TEITA HILLS

During early November we visited three of Kenya's lesser known though extremely rewarding birding localities: The Kitovo forest reserve near Taveta, Lake Jipe at the extreme southern edge of Tsavo West and the Teita Hills.

Our route to Taveta and Jipe took us through Amboseli and Tsavo West, then via the main Taveta-Voi road to the Teita Hills and finally returning to Nairobi from Voi along the Mombasa road. We would strongly recommend this to members of the Natural History Society for one of their weekend camps. A base camp could be set up at either Jipe or Taveta, as both the lake shore and Kitovo forest can easily be covered in a weekend visit.

The Kitovo forest reserve lies some eleven kilometres south of Taveta township and is a ground water forest, which as far as we know is unique in Kenya, though it does resemble some of the Kenya south coast forests. It is very similar to Lake Manyara ground water forest in many ways, though lacking the larger game animals. Nevertheless there is an abundance of Greater Bush Babies, both Blue and Colobus monkeys, while Red Duiker and Bush Buck can be seen in the deeper parts of the forest. A number of ideal camp sites are to be found, and ample fresh water is available from a fast flowing river, where no less than four species of Kingfishers were seen: Giant *Ceryle maxima*, Half-collared *Alcedo semitorquata*, Malachite *A. cristata*, and Brown-hooded *Halcyon albiventris*. Hornbills and birds of prey are common, with the Silvery-cheeked Hornbill *Bycanistes brevis* and Trumpeter Hornbill *Bycanistes bucinator* being particularly vociferous. Honeyguides are quite numerous and Kitovo must be one of the best localities for seeing the Lesser Honeyguide *Indicator minor*. Others seen were Scaly-throated Honeyguide *Indicator variegatus* and the rather rare and local Eastern Least Honeyguide *Indicator meliphilus*. Greenbuls were unusually scarce for such a lush locality, though we were fortunate in seeing on a few occasions the local and uncommon Grey-Olive Greenbul *Phyllastrephus cerviniventris* known only from a few localities in Kenya and Tanzania. Indeed, many other species otherwise rather local and uncommon in Kenya were seen, notably: Kenya Crested Guinea-Fowl *Guttera pucherani*, Palm Nut Vulture *Gypohierax angolensis*, Yellow Bill *Ceuthmochares aereus*, Violet Wood-Hoopoe *Phoeniculus granti*, White-eared Barbet *Buccanodon leucotis*, Nicator *Nicator chloris* and Red-capped Robin Chat *Cossypha natalensis*.

Our main interests however lay in trying to locate two extremely rare species, Pel's Fishing Owl *Scotopelia peli* and Kretschmer's Longbill *Macrosphenus kretschmeri*, but without success; maybe some other time. Nevertheless, for anyone visiting this area both these species should be looked out for, particularly the Longbill, as Kitovo forest is the only known Kenya locality. Altogether we recorded a total of ninety species in the one and a half days, and undoubtedly many more can be added.

Lake Jipe is easily reached from Taveta by a good road through the Jipe Sisal Estates, and this must surely be one of the most outstanding localities in East Africa for waterfowl. In many ways we feel it is superior to Lake Naivasha, as one can easily drive along the edge of the extensive reed beds, dotted here and there with patches of open water, and with the North Pare Mountains on the far shore outlined in the setting sun, it must be one of the most beautiful settings in Kenya.

To our surprise we found large numbers of Black Heron *Egretta ardesiaca*, with one flock alone of 250+ birds. In all we estimated at least 500 on one small section of the lake shore, and this must be without doubt the largest concentration of this species in East Africa. We have only recorded similar numbers in Madagascar. In addition we saw an abundance of herons, egrets, storks, spoonbills, ducks and geese. Noteworthy species seen were Pigmy Geese *Nettapus auritus*, Lesser Jacana *Microparra capensis*, Long-toed Lapwing *Vanellus crassirostris*, while in the adjoining grassland a small flock of Zebra Waxbill *Estrilda subflava* were seen. The sight one morning of one vast flock of 500+ Black Herons *E. ardesiaca* and Squacco Herons *Ardeola ralloides* flying over the reed beds will remain with us for evermore.

In addition to the bird life, large numbers of game drink at the lake. During our visit we noted elephant, rhinoceros, eland, zebra, giraffe and water buck, while lion were heard in the night. Camping sites are available close to the airstrip, sufficiently away from the lake shore to escape the mosquitoes, and for those who travel completely self-contained a most enjoyable weekend can be spent in this relatively unknown corner of Tsavo West.

The Teita Hills are easily accessible from the main Taveta-Voi road, the tarmac now extending up to Wundanyi, and the forest is only six kms further on. Here in an isolated patch of forest, one can easily observe by means of good forest tracks and forest edge paths, no less than two endemic sub-species: Teita Olive Thrush *Turdus olivaceus helleri* and the Teita White-eye *Zosterops poliogastra silvanus*. In addition three species are found only in this locality in Kenya, Striped Pipit *Anthus lineiventris*, Yellow-throated Woodland Warbler *Seicercus ruficapillus* and Bar-throated Apalis *Apalis murina* (also an endemic sub-species). Other species of interest seen here included Stripe-cheeked Greenbul *Andropadus milanjensis*, Orange Ground-Thrush *Turdus gurneyi* and Evergreen Forest Warbler *Bradypterus barratti*. Altogether A.D. Forbes-Watson has recorded one hundred species from the Teita Hills, giving an indication of the richness of this isolated forest.

All in all a most enjoyable five days were spent in areas hardly ever visited, yet so easily accessible from Nairobi, Arusha and Mombasa. Should anyone be interested in our complete bird list of each locality, together with a detailed sketch map of how to get there, please contact either of us.

A.D. Forbes-Watson,
Curator of Birds, National Museum,
Box 40658, Nairobi.

D.A. Turner,
Box 40658, Nairobi.

- - - - - - - - - - - - - -

THE FIERY - NECKED NIGHTJAR IN KENYA

The Fiery-necked Nightjar *Caprimulgus pectoralis* is not given for Kenya by Jackson (1938), Mackworth-Praed & Grant (1957), White (1965) or Williams (1963, 1967). (Mackworth-Praed & Grant refer to this species as *C. fervidus*, no.551, but following White and other recent authors we use the name *C. pectoralis*. This is rather confusing since Mackworth-Praed & Grant give this name to the Dusky Nightjar, no.548, which is referred to as *C. fraenatus* by White, Williams and other recent authors.)

Ripley & Bond (1971) have extended the range of the form *C.p. fervidus* from north-eastern Tanzania to coastal Kenya, on the basis of a female in breeding condition collected by A.D. Forbes-Watson in the Sokoke Forest on 26th November, 1964. Whilst camping in this forest on some thirty nights since 1969, in April, August, September, October and December, we have always heard this nightjar calling. It is mainly heard soon after dusk and before dawn, and calls far more on bright moonlit nights. Its beautiful liquid call is distinctive, consisting of two whistling notes, followed by a soft, musical trill. Judging from the frequency of calling it may be equally common in the closed-canopy "thicket" on red soil as in the more open woodland with *Brachystegia spiciformis* on white, sandy soils.

In Zambia we caught and ringed several Fiery-necked Nightjars by dazzling them on roads through *Brachystegia* woodland at night, yet we have never recorded this nightjar on roads in Kenya, despite our many drives along forest tracks at night. At dusk on 6th October, 1973 we ringed a male, captured in a mist net along a track through red soil "thicket" in Sokoke forest; but previously we had no more than glimpsed this species in Kenya. Elsewhere along the Kenya coast we did not hear this nightjar in several nights at Witu and Garsen in August, but we did hear it with Leslie Brown and Stuart Keith at the edge of the Boni Forest near Bodhei on 26th August, 1971. It may therefore occur sparingly in suitable habitat north of the Tana River, perhaps as far as the Somalia border.

According to the maps in Mackworth-Praed & Grant (1957), and the data in Jackson (1938) and White (1965), this nightjar occurs along both the Tanzania and Uganda shores of Lake Victoria, but is unrecorded in western Kenya. In September, 1971 we camped in an extensive area of thicket at Bar Olengo, south-west of Siaya township, western Kenya, and heard the unmistakable call of this species, which we had heard only a few days previously at the coast. Subsequently we visited this site ten or more times, often trying especially to capture this nightjar, but we failed to more than glimpse it. We heard it most nights we were there, and there is no doubting its occurrence in western Kenya, perhaps the form *C.p. nigriscapularis* which is widespread in Uganda.

Its west Kenya habitat is extensive areas of thicket in the drier southern and western areas of Siaya District, Central Nyanza. The Tsetse Fly has been only recently eradicated from these thicket areas which are now being settled, with consequent habitat destruction. Trees are up to only 5m high, often partly covered with lichen, and much of the ground is covered with mosses.

Characteristic trees are *Harrisonia abyssinica*, *Combretum molle*, *C. binderianum*, *Albizia zygia*, *Gardenia lutea*, *Euphorbia* spp., and others. These thicket areas look potentially interesting for birds, but the only other birds recorded there which we did not record elsewhere in Central Nyanza were the Snowy-headed Robin Chat *Cossypha niveicapilla* and the Black-bellied Waxbill *Lagonosticta rara*.

Thus the Fiery-necked Nightjar occurs in Kenya in suitable thicket/woodland habitat both along the coast and inland in the extreme west, near the shore of Lake Victoria. A specimen from the latter area might well prove to be *C.p. nigriscapularis*, a form yet unrecorded in Kenya.

Peter & Hazel Britton,
Box 90163,
MOMBASA.

REFERENCES·

Ripley, S.D. & Bond, G.M. 1971. Systematic notes on a collection of birds from Kenya. *Smithsonian Contributions to Zoology*. 111: 1-21.

White, C.M.N. 1965. *A Revised Check List of African Non-Passerine Birds*. Lusaka : Government Printer.

Williams, J.G. 1963. *A Field Guide to the Birds of East and Central Africa*. London : Collins.

Williams, J.G. 1967. *A Field Guide to the National Parks of East Africa*. London : Collins.

- - - - - - - - - - - - - - -

SIGHT RECORD OF NEST MAKING BY GREEN - BACKED HERONS *BUTORIDES STRIATUS*

On 20th August, 1973 at Seronera river I saw a pair of Green-backed Herons building a nest. A loose platform nest was built amongst tall, dense reeds 2m high above the water level.

The male bird brought building material and offered it to the female who stood waiting by the nest. In accepting the material, the female showed her appreciation by raising her crest and uttering a low croak before adding the material to the nest. Meanwhile the male stood by and constantly jerked his tail up and down. After placing the material on the nest the female coaxed her partner and sometimes allowed him to mate with her. After mating the female affectionately stroked the male with her beak and this seemed to please him. He then flew off a short distance and brought some more building material immediately.

Dry, thorny twigs, dry branchlets and dry grass stems were used to make the nest which took three days to complete. The first egg was then laid. I was unable to make further observations because I left Serengeti for my station in Arusha National Park.

Sipaeli A. Mungure,
Arusha National Park,
(Kusare Research Camp),
Box 3134, Arusha.

- - - - - - - - - - - - - - -

HORNBILLS AND BATS

At four o'clock on 19th October, 1973 two Silvery-cheeked Hornbills *Bycanistes cristatus* alighted on a large Albizzia-like tree in which a colony of about 20-25 Lesser Fruit Bats *Epomophorus labiatus* was sleeping at about 10m height amongst dense foliage. One of the Hornbills pounced on a cluster and sent the bats flying in all directions. After circling round close to the tree a few bats perched on the upper branches of the same tree, whereupon the second Hornbill proceeded to chase them away with the assistance of the first Hornbill. The two birds then inspected the entire tree, hopping from branch to branch in different sections of the canopy and tilting their heads in all directions. A few minutes later, however, three or four bats settled on the upper branches of the adjoining tree; the Hornbills were quick to notice this and chased them off the second tree as well, even pursuing them in flight. All the bats were dispersed eventually except for one that circled near the two trees. It was noticed by one of the Hornbills which dived on it in flight but was snapped at by the bat, (this incident took place at a distance of a few metres from where I was watching and I was able to see clearly the open mouth of the bat with all the teeth showing and the twist of the head as it snapped at the bird. I was not able to distinguish whether the Hornbill was injured or not). The Hornbill returned to the tree with all its feathers ruffled and the bat flew away. The two Hornbills remained in these trees for some time after all the bats had been chased away, still hopping from one branch to another, then pausing to look in all directions, especially upwards and downwards through the leaves.

Two Hornbills, presumably the same ones, returned to these trees during the early afternoon of the following day and chased off one or two bats. On the third day two Hornbills were honking loudly in the topmost branches of these trees, no bats were seen.

NOTE: Between 20-25 bats had been roosting regularly in this particular spot for at least four weeks. Hornbills had also passed by regularly but were usually in the canopy. The bats have not been seen again.

Mrs. J. Kingdon,
Xeno Farmhouse, Lyamungo,
Kilimanjaro, Tanzania

- - - - - - - - - - - - - - -

SOUND RECORDINGS

A note of interest recently seen in *Ibis* Vol.115 p.444, July, 1973:

KER, A. 1972. Safari 99. Narration by Peter Clare.
Cassette tape ($1\frac{7}{8}$ i.p.s.) - duration 1 hour. ESS 1001. Price K.Shs.50/=.
From Equator Sound Studios Ltd., Nairobi, Kenya.

The quality of this cassette tape is remarkably good and compares favourably with many L.P. discs. Of the 99 recordings 54 are devoted to birds. The cuts are short but adequate and usually representative, and most are free from serious background noise. The spoken comments are brief and pertinent; no tape space is wasted. Latin binomials are not given but an accompanying check list includes short descriptions of physical characteristics and some notes on habitat. Anyone with an interest in East African wildlife will welcome this tape.

- - - - - - - - - - - - - - -

DEATH OF A YOUNG ELEPHANT

In the afternoon of 4th October, 1973 while driving along the banks of the Tsavo River, we came across the swollen carcase of a dead cow elephant *Loxodonta africana*. Twenty metres beyond the corpse, on a bend in the track, we saw a very young baby elephant also lying dead, close to the road. The baby's corpse had been covered over with the branches of a nearby acacia thorn bush, by the baby's irate mother, who was now guarding her fallen offspring.

She was shuffling about in the road blowing dust all over herself. On several occasions we attempted to get past the obstruction only to be greeted by the enormous hulk of the charging mother, who was determined that no one was going to get nearer than ten metres to her dead calf. She indicated without hesitation that she would have flattened us to the ground had we ventured any closer. We left the area with no alternative except to turn back the way we had come.

I suspect the dead calf, as well as the dead adult, had died of malnutrition, as both carcases were very thin with cracked, slaty hides. I think much of the vigour exhibited by the bereaved cow in her vigilance can be attributed to the possibility that this was the death of her first-born calf, since she herself was not very old.

Elephants have been known to cover the remains of dead people with branches from nearby bushes. There have also been recorded cases where elephants have covered up sleeping men with branches. From the above mentioned episode I have come to the conclusion that there is far more psychological make up of elephant than apparently meets the eye. They are evidently emotional beasts.

Mark Warwick,
Box 30486,
NAIROBI.

MARINA WEEK - END

During the week-end 3rd/4th November the Society had a most enjoyable excursion based at the Marina Club, Naivasha, where we had been offered very favourable terms. Some members stayed in style at the pleasant bandas on the cliff top, others in do-it-yourself bandas and yet others camped. Bird watching was superb on the mudflats on the lake shore, some of the most interesting recordings being: a Black Heron *Egretta ardesiaca* doing its characteristic fishing by shading the water with its wings, a Turnstone *Arenaria interpres* and two Grey Plovers *Pluvialis dominica fulva*, the latter two species more often seen on the coast than inland. Also numerous Curlew Sandpipers *Calidris ferruginea*, Little Stints *C. minuta*, and two Bar-tailed Godwits *Limosa lapponica* were seen. Several Ospreys *Pandion haliaetus* were around as well as flocks of Lovebird sp. which seemed to roost for the night in an old Fish Eagle nest.

The Coypus seem to increase in number every time one visits the lake. This time they were quite easily observed sitting out of the water on little mounds of water lily leaves. On the muddy banks numerous crayfish were observed. For most members this was completely new, and they are apparently an American type of crayfish, which was introduced into the lake some years ago, and now seem to have bred up to quite a large number judging from the numerous animals seen in the small area of the lake that we visited.

On Sunday a visit was made to Hell's Gate. Unfortunately the Lammergeyers *Gypaetus barbatus meridionalis* were not seen on the cliff face - probably due to climbing activity in progress at the time. The birds had been seen by a member three weeks previously about 9.00 a.m. and at about midday the previous day. During the search for the Lammergeyers a Lanner Falcon *Falco biarmicus* was seen. We then visited the nesting colonies of Ruppells Griffon Vultures *Gyps rueppellii* and it was amazing to see how these huge birds completely disappeared once they had settled on the ledges on the cliffs, so that it was difficult to pick them out even if one had seen them landing..

A surprising number of mammals were seen - in particular groups of Klipspringer *Oreotragus oreotragus* together with Steinbok *Raphicerus campestris* & Chanler's Reedbuck *Redunca fulvorufula*. At Fischer's Tower the Hyrax *Heterohyrax brucei* were remarkably tame - in fact so tame that they came running up to greet the visitor and look for food. One wonders if such friendliness could in future be a danger to their safety ...

L.C.

- - - - - - - - - - - - - - -

LIBRARY NOTICES

The Library needs a copy of *The Leopard* by Turnbull Kemp. Bailey Bros. and Swinfen, 1967. We understand this book is out of print. Will anyone who knows of a copy for sale (or available as a gift to the Library) please let the Librarian know.

Praed & Grant: *Birds of Eastern and North-Eastern Africa*. 2 vols. Nice copy for sale - Shs. 1000/=. Please apply to the Librarian (who will do as she did last time - wait a month to allow applications from up country to come in and then draw).

There are a number of back issues of the *Bulletin* for sale, price Shs. 2/=. Apply to the Librarian, stating which issues you need. (Some are out of print.)

P.M.A.

- - - - - - - - - - - - - - -

REVIEWS

A FIRST GUIDE TO THE INDIAN OCEAN SEASHORE by F.M.J. Pinn
Naircbi, Oxford University Press, 1973. Price Shs. 7/=.

This book is the first and only successor to Mr. H. Copley's "Wonders of the Kenya Seashore" published by the Ndia Kuu Press in 1946 and long out of print. The publishers state that it "has been graded to be suitable for standards 6 and 7 in Kenyan Primary Schools, but that it will also interest"the general reader and tourist".

Mr. Pinn was a member of our Society while in this country and many of us remember his talk on the Kenya Reef and his delightful slides. Some of us too cannot help remembering that in some cases he was none too sure of his identifications.

I remember in my own youth being told by the dentist who was about to extract one of my teeth that while he had to exert a pull of x lbs in the desired direction, he also had to exert a pressure of y lbs in the opposite direction in order to get perfect control. This, to me, puzzling piece of information given at such an impressionable moment, has remained in my mind as an example of the apparently disproportionate amount of effort that has to be made to achieve a seemingly trivial result. The writer of a book for children must have an easy flowing style and much background knowledge, and his book should certainly, if it is any good at all, be interesting to older people as well.

I cannot help contrasting this book rather unfavourably with its predecessor. Certainly Mr. Copley managed to tell us in 78 pages infinitely more than Mr. Pinn tells us in his 74. According to Mr. Pinn's index, he deals with 39 creatures or objects. Mr. Copley describes or mentions the same number in his first 24 pages, and these include a chapter on the causes of tides and the formation of the reef, subjects which Mr. Pinn hardly mentions. He says, "The tides are very important to us when we stay at the seaside. We should know something about them. When the sea goes out we say 'the tide is going out' but when the waves are slowly moving up the beach again, we say 'the tide is coming in'." Another short paragraph in the same style and that is all. He then takes up a whole page with a reproduction of the tide table for August, 1971. Mr. Copley says, "Now you won't be at the seashore long before you hear about high and low tide, so perhaps we can say a few simple words on tides and how they are formed. Owing to the pull of the mass of the moon ..." and so on, and he gives us a page of diagrams.

Mr. Pinn's style does not flow and somehow does not inspire confidence. He explains elaborately any words he uses which he thinks children may not understand - 'beach-combing', 'fidler', 'camouflage'. He gives no scientific names. Presumably the book is intended for African children, and they of course should be taken straight on to scientific names, which are no harder for children to learn than English ones, if they are not frightened off them by injudicious adults. What use is a name like "Peacock worm" to an African child? He had better be told straight away that it is a Sabellid or Serpulid or whatever it is. I do not know myself as Mr. Pinn has not told me and it is one of the few creatures whose scientific name Mr. Copley does not supply. And rather than tell us that the Razor Shell is called "Chinaman's fingernail" in Australia, more attention could surely be paid to Swahili names. When I was with Myles North at Kiunga we found that the fishermen had names for all the different species of Tern, though I found them very difficult to distinguish, and they surely have names for all or most of the creatures mentioned by Mr. Pinn, many of them very likely charmingly descriptive such as the one for a Starfish - "Kiti cha pweza", the seat of the octopus.

It may be complained that I am asking for the book to be much larger, but as it is the pages are nearly all half blank and only half printed on. The illustrations are mostly good and clear, though it is a pity that the first one, intended to be a general view of the beach, is so fanciful. But many of the drawings would have been just as clear if they were smaller, especially if some of the crabs are only to have six legs.

"Little boys first" said Mr. Robson, preparing to show some of his collection of shells at the end of another of our lectures. I was with a little boy, a junior member of the Society, and I can bear witness to the pleasure that that announcement gave. "I thought I wasn't going to be able to see them" explained my small companion. By all means little boys first - and little girls too. There just did not happen to be any little girls at that particular lecture. But it is a pity to aim so low that anyone over the age of four will realise that he is being talked down to.

P.M.A.

- - - - - - - - - - - - - - -

"AVIAN ANATOMY - Integument" Parts I and II
by Alfred M. Lucas and Peter R. Stettenheim.
Agriculture Handbook 362, United States Department of Agriculture in co-operation with Michigan Agricultural Experiment Station, September, 1972.

This "Handbook" comprises two separate volumes which beteeen them contain 750 pages of text and 422 illustrations. The book constitutes Parts I and II of a series of publications on the anatomy of the fowl and other domestic birds.

The book deals primarily with the chicken, turkey, duck, quail and pigeon but particular emphasis has been laid upon the chicken. In addition however, reference is made to a very large number of other avian species (ranging from ostriches to humming birds) and it is refreshing to find a classified list of these, with scientific names, rather than just their English nomenclature.

The book deals with the skin and other integumentary appendages (feathers, comb, wattles, oil gland etc.) of birds. Each topic is discussed in meticulous detail and the chapters cover such subjects as feather structure and tracts, the moult, growth of follicles and feathers and microscopical structure of the various skin derivatives. The final chapter on "Techniques" is of particular value since it describes the authors' experiences of a wide range of procedures including anaesthesia, skeleton preparation, histological methods and illustrative techniques. The list of references is also useful; it consists of over 900 references and in each case the title of the paper or book is given in full.

There is no doubt about the merit of this book. It is a well written account of years of study and the authors have done well to make the text of such a detailed treatise so readable. No glaring printing, spelling or grammatical errors have been noted but there is a (corrected) mistake under "Contents" in Part II and the word "data" is used as a singular word in the Preface and thereafter (correctly) as a plural noun. It is regrettable that in some places the literature cited is not entirely up-to-date; a striking example is under anaesthesia where the latest reference is 1965, seven years before this book was published. Mention should also be made of the method of killing birds by electrocution recommended by the authors; the reviewer has some doubts as to the humanity of their techniques.

This book will, undoubtedly, remain the standard text on the avian integument for many years. It will prove of great value to zoologists, avian anatomists and pathologists, veterinary surgeons and, probably, to those involved in the genetics of poultry breeding. However, it is likely to prove too complicated and detailed to have much appeal to the field naturalist with the possible exception of the useful data on techniques, especially skeleton preparation and the photographing of feathers. The professional ornithologist may, as the authors hope, find it of value; but even here his concern is likely to be only with specific topics such as the section on the moult and plumages or, perhaps, the very valuable revision and clarification of anatomical terminology.

J.E. Cooper

NEW MEMBERS FOR OCTOBER / NOVEMBER 1973

DR. A.E. Butterworth, Box 43640, Nairobi
Mr. & Mrs. T.F. Corfield, Box 14705, Nairobi
Mr. Patrick Duncan, Box 42481, Nairobi
Mr. & Mrs. S.A. Ombler, Box 30061, Nairobi
Mr. John C. Onyango-Abuje, Dept. of History, University Nairobi
Mr. Gary L. Siglar, 599 South Str., Glendale, Cal 91202, USA.

LARUS ICHTHYAETUS

With reference to the record of *Larus ichthyaetus* in the October Bulletin (p.138), it might be interesting to recall that in January, 1961, when I was in Uganda, a member of the Society, Mr. Robin Palmer, told me that he had seen a Great Black-headed Gull at Entebbe. It seemed unlikely, but was so positive that I made a note of it. He said the size and the marking of the bill identified it.

P.M. Allen

SOCIETY FUNCTIONS

Monday, 10th December, 1973 at 5.15 p.m. at the National Museum Hall, Nairobi - change of programme. There will now be a FILMSHOW, "Trout Stream", "Waterfowl - A resource in Danger" and other wildlife films.

January 12th/13th, 1974: By special arrangement we have been offered a weekend at Cottars Camp, 20 miles from Mtito Andei on the Athi River:

Full board, adults - Shs. 80/=
Full board, children - Shs. 40/=
Use of vehicle - Shs.150/= (for 7 persons)

Members should make their own way to the camp. Vehicles are parked on the Mtito Andei side of the river and guests are ferried across to the camp. Game watching away from camp takes place in hired vehicles.

If you want to take part in this excusion, please send full payment (in cheques made out to "Forest & Frontier Lodges") to Mrs. A.L. Campbell, P.O. Box 14469, Nairobi, as early as possible and not later than 15th December, 1973, giving full address and telephone number. Members should bear in mind that letters sometimes take over a week to reach Mrs. Campbell.

Monday, 14th January, 1974 at 5.15 p.m. at the National Museum Hall, Nairobi. Mrs. J. Rudnai will speak on "Lion Behaviour".

February 9th/10th, 1974: Weekend at Chemoni Estate,Nandi Hills. Leader - Mr. D. Cape. Full details will be available in the next issue.

Wednesday morning birdwalks: meeting at the National Museum at 8.45 a.m. These will continue in December and January with the following alterations: There will be no birdwalk on 12th December (Independence Day) or 2nd January. On 19th December it will be an all day trip so please bring a picnic lunch. Birdwalks will be held as usual on 5th December, 26th December (Boxing Day) and the rest of January. Students and beginners are welcome. Small children may come too, as long as they are supervised.

- - - - - - - - - - - - - - -

THE EAST AFRICA NATURAL HISTORY SOCIETY

Chairman: J. S. Karmali
Vice Chairman: Mrs A. L. Campbell
Editor, Jl E. Africa nat. Hist. Soc. & Nat. Mus.: Dr P. J. Greenway O.B.E.
Secretary: Miss J. Ossent
Librarian and Assistant Secretary: Miss P. M. Allen
Treasurer: M. P. Clifton
Executive Committee (in addition to the above): Miss D. Angwin; G. C. Backhurst (*Ringing Organizer* and *Editor EANHS Bulletin*); A. D. Forbes-Watson (*Co-Editor Journal*); Mrs. J. Hayes; R. E. F. Leakey; E. T. Monks; C. E. Norris;
Co-opted members: Mrs H. A. Britton (*Nest Record Scheme Organizer*); A. Duff-MacKay; J. Gerhart; T. D. Morris; Mrs F. Ng'weno; Mrs A. Sparrow.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the *EANHS Bulletin* every month; a copy of each *Journal* published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers; the Society runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes a leading and highly respected scientific journal—*The Journal of the East Africa Natural History Society and National Museum*. Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated monthly magazine which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to the Editor (*EANHS Bulletin*), P.O. Box 29003, Kabete, Nairobi, Kenya. Line drawings will be considered if they add to the value of the article, photographs cannot be published.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: K shs.	500/-
Institutional (shools, libraries) . .	annual payment: K shs.	50/-
Full	annual payment: K shs.	50/-
Junior (full-time student, no *Journal* supplied)	annual payment: K shs.	10/-

Subscriptions are due 1st January. From 1st July you may join at half the yearly rate and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
S.I

E A N H S

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings.

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin.* The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN JANUARY 1974

CONTENTS

The Long-legged Buzzard *Buteo rufinus* in East Africa - - - - - - - - 2
Pomarine Skua on the Kenya Coast - - - - - - - - - - - - - - - - - - - 4
White-faced Tree Ducks nesting on islets off the Kenya Coast - - - - 5
Rearing a nestling Pigeon - 7
Two exciting Kenya birding spots - - - - - - - - - - - - - - - - - - 9
Letter to the Editor - 9
Request for information - 10
Society Functions - 10
Important Notice - 11
Ringing News - 11
For Sale - 11
Library Notice - 12

THE LONG - LEGGED BUZZARD *BUTEO RUFINUS* IN EAST AFRICA

Backhurst *et al.* (1973) give only two East African records of the Palaearctic migrant Long-legged Buzzard *Buteo rufinus*; both from Kenya in November (1958 at Loiengalani and 1966 at Naivasha). They mention only one other record from further south (Zambia - also in November). Moreau (1972) says it reaches South Africa, apparently following Mackworth-Praed & Grant (1962) who record it from South West Africa, but Bolton & Clancey (1972:202) state that it is unacceptable so far south, although they have a photograph from Mata-Mata, near the southern border of South West Africa, which "appears to be *B.r. rufinus*". We have the following recent records from Uganda and Kenya.

On 24th and 25th March 1970, DAT saw 4 and 2 respectively in the Kidepo National Park, N.E. Uganda which were identical to the figure on plate 22 in Peterson *et al.* (1954). He also heard from D. Ebbutt (*in litt.*) who had seen one at Gulu on 2nd October 1967. Rolfe & Pearson (1973) recorded one near Mt. Kadam, eastern Uganda on 29th December 1971. These appear to be the only actual records for Uganda, although Williams (1967) says it is "an uncommon winter visitor . . . . to Karamoja".

D.A. Zimmerman and L Binford (pers. comm.) saw a single *B. rufinus* on the Kinangop, central Kenya, on 19th October 1973 (they will be reporting their observations in this *Bulletin*).

At about noon on 3rd November 1973 at 3.24'S., 37.43'E. (*c.* 5 km east of Taveta, S.E. Kenya) we saw a bird of prey perched on a baobab by the side of the track we were following to Lake Jipe. From our vehicle, at a range of *c.* 25 m, DAT had a good, but brief view of it before it flew. It then circled leisurely overhead and we both had very good views in very good light of the upper and under-parts; it spiralled upwards in a thermal with motionless wings and eventually glided off to the east after 3 - 4 minutes. (Had it flown westward for only 8 km it would have been the "first" Tanzanian record!) DAT was using 8 X 32 binoculars and ADFW 7 X 50's. At rest it appeared a thickset dark hawk, rather larger than Wahlberg's Eagle *Aquila wahlbergi*, seen by us the previous day; DAT noted upperparts dark slaty, pale forehead, yellow feet and partially feathered tarsi. In flight the upperparts were dark, tail barred and there was a pale "window" in the wing near the wrist, otherwise it was very like the diagram of the Long-legged Buzzard on pl. 22 in Peterson *et al.* (1954) (*viz.* a rather heavy, broad-winged bird of prey more eagle - than buzzard-like, with a long square tail; underparts rufous on body, tail and under wing-coverts, wings otherwise whitish with faint bars, primaries black), with the notable exception that our bird had a distinct black sub-terminal tail bar. The "jizz" and flight pattern etc. of this bird were such that ADFW felt immediately that it was something new to him.

On our return to Nairobi we found the following standard works do not mention or figure the obvious character of the tail bar: Mackworth-Praed & Grant (1952, 1957 and 1962), Meinertzhagen (1954), Peterson *et al.* (1954), Cave & Macdonald (1955), Williams (1967), Bruun & Singer (1970) and Heinzel *et al.* (1972). However, Brown & Amadon (1968:623 under phase I) say that the dark phase of *B.r. rufinus* does have a dark tail bar; DAT notes that their figure on pl. 107 is identical to the view he had of our bird at rest, including the barred upper surface of the tail. The tail bar is also mentioned in Archer & Godman (1937) and Grossmann & Hamlet (1965, with a good figure of the flight pattern). It appears, therefore, that our standard Field Guides should be amended in regard to the field characters of this species.

It is tempting to suggest that this eastern Kenya record relates to the dark easterly Caucasian population, with other records from further west relating to more normal westerly rufous populations (we do not know the phase of Zimmerman & Binford's bird, but assume it to be normal as they apparently had no identification problems).

As there are already two sightings from Kenya this year, observers should look out for Long-legged Buzzards throughout East Africa and further south, as it may be a particularly good year for them. Moreau (1972) mentions that it is likely to occur in more arid localities than does the common migrant Eurasian Buzzard *B. buteo vulpinus* (the Steppe Buzzard).

Incidentally, the value of bird photographs is dramatically shown by Bolton & Clancey (1972) when pictures taken by Bolton were scrutinised by Clancey, and three species of migrant birds of prey were added to the list of birds known to have occurred in southern Africa (Red Kite *Milvus milvus*, Saker *Falco cherrug* and Barbary Falcon *F. pelegrinoides*, often considered as a race of the Peregrine *F. peregrinus*). With the possible addition of *Buteo rufinus* mentioned above, truly an impressive list of "firsts" for a ten-day safari; indeed, the Red Kite is the first record for the Ethiopian zoogeographical region. Reproductions of some of the photographs are thoughtfully published by them for individual appraisal.

D.A. Turner,
Box 48019,
Nairobi.

A.D. Forbes-Watson,
Box 40658,
Nairobi.

REFERENCES:

Archer, G & Godman, E.M. 1937. *The birds of British Somaliland and the Gulf of Aden.* London: Gurney & Jackson. Vol.I:237.

Backhurst, G.C., Britton, P.L. & Mann, C.F. 1973. The less common palaearctic migrant birds of Kenya and Tanzania. *Jl E. Africa Nat. Hist. Soc & Nat. Mus.* 140:8.

Brown, L.H. & Amadon, D. 1968. *Eagles, Hawks and Falcons of the world.* Feltham: Hamlyn for Country Life Books. Vol.2.

Bolton, E.L. & Clancey, P.A. 1972. Some interesting records of wintering palaearctic raptors from the northern Cape. *Durban Mus. Novit.* 9:201-207.

Bruun, B. & Singer, A. 1970. *The Hamlyn Guide to birds of Britain and Europe.* Feltham:Hamlyn:78-79.

Cave, F.O. & Macdonald, J.D. 1955. *Birds of the Sudan.* Edinburgh: Oliver & Boyd:94-95.

Grossman, M.L. & Hamlet, J. 1965. *Birds of Prey of the World.* Bonanza Books: 268.
Heinzel, H, Fitter, R. & Parslow, J. 1972. *The Birds of Britain and Europe.* Collins: 76-77, 88.
Mackworth-Praed, C.W. & Grant, C.H.B. 1952 (1957 2nd ed.). *Birds of eastern and north eastern Africa.* London: Longmans, Vol.1:195-196.
Mackworth-Praed, C.W. & Grant, C.H.B. 1962. *Birds of the Southern third of Africa.* London, Longmans, Vol.1:175-176.
Meinertzhagen, R. 1954. *Birds of Arabia.* Edinburgh, Oliver & Boyd: 355-356.
Moreau, R.E. 1972. *The palaearctic-African bird migration systems.* London, Acedemic Press:202.
Peterson, R., Mountford, G. & Hollom, P.A.D. 1954. *A field guide to the birds of Britain and Europe.* London, Collins:7 , 76.
Rolfe, J.G. & Pearson, D.J. 1973. *EANHS Bull.*:63.
Williams, J.G. 1967. *A field guide to the National Parks of East Africa.* London, Collins:232.

- - - - - - - - - - - - - - -

POMARINE SKUA ON THE KENYA COAST

The four species of skua or jaeger are piratical sea-birds closely related to gulls. The three smaller species nest circumpolarly in the arctic tundra, and winter in the Atlantic and Pacific Oceans, frequently south of the equator. The Great Skua *Stercorarius skua* nests circumpolarly on sub-antarctic islands and a discrete population nests in north-west Europe. Two of the exclusively northern species have wandered to Kenya, each once: the Arctic Skua *S. parasiticus* at Malindi and the Long-tailed Skua *S. longicaudus* at Lake Rudolf (Backhurst, Britton & Mann 1973). The southern form of the Great Skua is listed for Kenya by Backhurst & Backhurst (1970) but there is no reason to believe that northern birds reach eastern Africa.

The Pomarine Skua *S. pomarinus* winters off the Atlantic coast of Africa, and is recorded in the Red Sea and the Gulf of Aden by Mackworth-Praed & Grant (1957). We know of no record from the Indian Ocean coast of Africa but there is an old specimen from Sri Lanka (Ceylon) mentioned by Henry (1971). A light phase adult seen recently near Mombasa is apparently the first record for East Africa.

At the north end of Nyali Beach, Mombasa there is a favourite resting area for gulls and terns where we make almost daily bird counts. On 7th December 1973 we were watching a group of Sooty Gulls *Larus hemprichii* when a Pomarine Skua startled us by appearing suddenly at only 12 m range chasing an adult Sooty Gull. It pursued the gull for only a moment before departing out to sea as suddenly as it had arrived. It was in sight for only three or four minutes but was immediately recognisable as an adult

Pomarine Skua of the light phase. Being such a brief encounter it is relevant to mention our familiarity with this species at sea in the South Atlantic and off Sierra Leone as well as on passage in Ireland: and we have spent many hours watching Arctic Skuas and Great Skuas in their British nesting haunts. We have always found that skuas have a very distinctive "jiz" or "overall impression" when in flight, so that they may be identified immediately. The circumstances of this sighting prevented us obtaining photographic or other evidence, and the description which follows is rather sparse. But sufficient points were noted for a positive identification to be made, in particular the bird's size and the shape of the tail.

In size it was virtually the same as the Sooty Gull it was chasing, perhaps marginally larger. It was brown above, including much of the head. Below it was whitish on breast and neck but was dusky on the lower belly and across the chest, although the latter did not form a clear band. The bill and iris were dark. It had the pale "window" at the base of the primaries which is typical of skuas. The primary feathers themselves were very ragged, and its rather pale secondary coverts and upper tail coverts were probably the result of wear. One of the central tail feathers was blunt and elongate (about 5 - 8 cm longer than the other tail feathers) but the other was broken off.

Peter & Hazel Britton,
Box 90163,
Mombasa.

REFERENCES:

Backhurst, G.C. & Backhurst, D.E.G. 1970. *A preliminary checklist of East African birds.* Kabete, Nairobi: duplicated.

Backhurst, G.C. Britton, P.L. & Mann, C.F. 1973. The less common Palaearctic migrant birds of Kenya and Tanzania. *Jl E. Africa nat. Hist. Soc. Nat. Mus.* 140:1 - 38.

Henry, G.M. 1971. *A guide to the birds of Ceylon.* London, O.U.P.

- - - - - - - - - - - - - - -

WHITE - FACED TREE DUCKS NESTING ON ISLETS OFF THE KENYA COAST

In most areas of Kenya away from the highlands, the White-faced Tree Duck *Dendrocygna viduata* is the commonest anatid; yet there is little evidence that it breeds at all regularly in Kenya, or indeed anywhere in East Africa.

The few breeding records given by Jackson (1938) are from the Kenya coast, including a clutch taken on the Kiwiyu Islands, near Kiunga on 24th August 1906. On this same date, and at the same locality, two clutches of the Fulvous Tree Duck *D. bicolor* were taken; and referring to this latter species Jackson remarks "it is curious that this duck, so essentially a lover of quiet, sheltered spots on inland waters, should select for nesting such exposed and wind-swept coral islets half a mile or more from land". Jackson's other coastal records of the White-faced Tree Duck are of ducklings inland from Lamu in August and September. It is worth putting on record a subsequent instance of nesting on the Kiunga Islands, which indicates that this may be a regular habit.

With Leslie Brown we visited the Kiunga Islands, north of Lamu in August 1970 and August 1971, mainly in search of nesting terns. While searching an islet at Mlango wa Hindi on 28th August 1971, we found a White-faced Tree Duck nest with seven tiny ducklings. Nearby we found an identical nest containing six abandoned eggs, each containing a fully formed, recently dead duckling. Both nests were made of dry grass, and were situated in low cover on the top of the islet; two eggs measured 51 X 38 mm. Since the latter nest had evidently been only recently abandoned it is reasonable to assume that a second pair was involved, probably this species. Having been flushed, the adults from the first nest settled on the sea, where they remained throughout our stay.

The islet was typical of the smaller islets of the Kiunga group, being about 12 m high, a hectare or less in area, and more or less covered with a mat of low vegetation. Unlike the larger islands nearby, like Simambaya Island, these mushroom-shaped coral islets support no resident birds, but may be covered with nesting terns in August and September. As Jackson pointed out, such an inhospitable site is a surprising choice for nesting, especially as the adults presumably feed at freshwater inland sites. The security afforded by offshore islets at the height of the south-east monsoon in August is a possible explanation. Man is not however a likely predator in the sparsely populated hinterland, but the complete lack of mammalian and reptilian predators on these islets may well be important.

The few coastal records available indicate laying in July and August. Other Kenya records indicative of breeding are the birds in breeding condition shot near Kisumu in March (M. St J. Sugg), and at Elgeyu, near Eldama Ravine, in August (Jackson 1926, Notes on the game birds of Kenya and Uganda. London: Williams & Norgate). Jackson (1938) gave no Uganda breeding records, but the E.A.N.H.S. Nest Record Scheme includes recent records of ducklings from western Uganda in January, March, July and October (National Parks staff), and a bird incubating eggs at Soroti in June (C.F. Mann). The only definitive Tanzania record is of an adult brooding at Arusha Chini, near Moshi on 10th March (J.S.S. Beesley).

Conclusions on breeding seasons are impossible from the scant data available, neither is it possible to gauge the extent to which birds seen in East Africa breed elsewhere. These are problems which only wildfowlers can easily solve, by recording gonad activity in shot birds, not only for this species but for all anatids (ducks and geese). For example there are no cards for the Fulvous Tree Duck in the Nest Record Scheme collection, although published nesting data exist for Tanzania (Wembere River) and Kenya (Lakes Magadi and Rudolf, and the above records from Kiunga).

Peter & Hazel Britton,
Box 90163,
Mombasa.

- - - - - - - - - - - - - -

REARING A NESTLING PIGEON

On 12th November, as my husband and I started off to the National Museum to hear Dr. John Cooper's lecture on helping sick, injured, and orphaned wild animals and birds, we discovered a nestling on the ground just at our gate. It was covered in grey down and yellowish "hairs". It looked like a miniature haystack except for its very long, heavy bill and its bright eyes. I picked it up, packaged it carefully in a kleenex, and off we went to learn about caring for it. Dr. Cooper examined the bird, pronounced it a healthy specimen of some species of pigeon - possibly a red-eyed dove - and suggested we try to return it to its parents.

After a very interesting and worthwhile lecture, we returned home, planning to put the nestling in a box and place the box in the tree where, at frequent intervals, we had seen two doves. Unfortunately it rained very hard as we were making the necessary preparations, so "Oscar" spent the night in a heated airing cupboard.

The next morning we placed Oscar and the box in the tree. As we observed from the window, one of the doves entered the box several times. It was a rainy, chilly day and we were concerned that the little fellow would die from hunger and cold, so I brought him indoors. I prepared a porridge of bread, milk, uncooked egg yolk, and raw, finely shredded beef. I rolled the mixture into very small balls and forced them between his mandibles from the side, a dozen or so went down his gullet before he began to resist. Then I used a medicine dropper to give him some water - a glucose saline solution that Dr. Cooper had recommended. The bird liked the plastic dropper, and tapped at it eagerly, perhaps responding to it as he might to his mother's bill. Fed and watered, he marked me with his appreciation and fell asleep. Another night in the airing cupboard.

For three days we placed him in the tree but although the parent doves stayed on a bough nearby, they performed no useful function that we could see. So we adopted him; I continued to feed him the balls of porridge mixture, but as I had no idea of his requirements, I force-fed him every hour until he resisted.

By 15th November, his straw-like hair began to thin out and his feathers unfurled. On 16th November, he began to peck at his food, the plastic bowl, and his long toes whenever he happened to see them. Now brown feathers dominated the the grey down. Occasionally he stretched his wings and on the 17th he began to preen, his cheeping became distinctly audible, and he wing-stretched frequently. Out-of-doors, he reacted with fear to a pied crow that flew low overhead even though he was safely ensconced on my lap. He cocked his head with interest when he heard a dove cooing. Later, indoors, the cuckoo in my clock startled him, but he showed interest rather than fear.

On 18th November, we measured him from breast to tip of tail (I couldn't get him to hold his head still): 14 cm. We estimated that he had grown 2.5cm since the day of discovery. He weighed approximately 56 g. As I did not want a retarded bird, I encouraged him to perch on a dead branchthat I had placed on the grass. He seemed steady enough, but obviously did not like the hot sun for he side-stepped clumsily along the branch into the shade. In the afternoon, he sipped too much glucose saline (I assume) for he had diarrhoea and looked rather miserable. However, by the evening he was quite perky again and clawed and fluttered onto my shoulder where he roosted contentedly until he was placed in the airing cupboard for the night.

A week after his rescue, he pecked his porridge, sipped his water and perched without assistance or encouragement and flew 25 cm from my lap to the arm of the chair in which I was sitting. On the 20th, he had doubled his weight to 112 g and now measured 15 cm breast to tail tip. On 22nd, he weighed 140 g and measured 17 cm. He flew 1 m just above the grass and was so astounded by his daring performance that he did not try again until the next day when he flew 1.5 m at about 1 m above the ground. He rested on my shoulder, wing and tail stretched, preened and fluttered but refused to take another flight.

It is the 24th November as I write this - he has pecked at some wild seed unsuccessfully, walked about on the grass pecking at everything and nothing, and now is sitting on a branch some 3 m above my head. He flew there with a great fluttering but made a perfect two point landing. I am not sure that he is pleased with his position for he is wing shivering and cheeping loudly. Every time a Fiscal Shrike, who is feeding two fledglings, approaches he presses down against the branch. I imagine that he is quite defenceless so I am on constant guard.

The entire incident has been interesting to us and I feel somewhat victorious and because I thought fellow novices and non-experts might be intersted, I have wriiten the story in some detail. But a word of caution: I have heard that the success rate is low and if your emotions become involved, as mine have, it can be a very sad affair. The joys of dove "motherhood" are not unalloyed either. I have had to curtail my usual daytime activities to stay with the little bird, feeding him, talking bird talk, protecting him from falls, wind, other birds and my jealous cat who is an ardent bird-watcher. Despite the fact that I love the little creature, he has been a burden (aural pun intended). Next time I would set up a small aviary where a young bird could prepare for flight and, though unattended for short periods, be safe. Now I have the task of returning him to his natural life-style and I am not sure that it will be easy for either of us. Oscar thinks I am his mother and at this moment is wing-shivering and cheeping for rescue and lunch.

Jane Williams-Chandley,
Box 30465,
Nairobi.

- - - - - - - - - - - - - - -

TWO EXCITING KENYA BIRDING SPOTS

During a visit in early October to Manda Mtoto Island in the Lamu Archipelago, I watched thousands of migratory birds. In addition to the more common waders and plovers, at least two hundred Curlews *Numenius arquata*, dozens of Whimbrels *N. phaeopus*, a lone Osprey *Pandion haliaetus*, plus dozens of Little Terns *Sterna albifrons*; also thousands of other species of terns which were not identified specifically due to lack of time. At least four Oystercatchers *Haematopus ostralegus* and two dozen Caspian Terns *Sterna caspia* were also seen.

Ras Kitau Beach Hotel and its environs situated on the main Manda Island, offers a bewildering variety of bush country species and migrant waders. I counted twelve Spotted Morning Warbler *Cichladusa guttata* in a half km radius, and they, plus numerous other species provide a memorable dawn chorus. The managemant of Ras Kitau are geared to cater for ornithologists who wish to visit different islands in the archipelago, and in addition can supply camping equipment.

For a different type of ornithological experience, a couple of days spent at Elephant Camp, about 22 km south of Garissa on the Tana River is recommemended. In the thick thorn scrub and riverine forest at least fifty species can be identified in a day. The Tana River area with its camels, crocodiles, elephants etc. and the friendly Malakote, Orma and Somali peoples is fascinating; in addition, the wilderness of the Northern Frontier Province will appeal to all lovers of the African bush.

D.D. Spindlow,
Box 18240,
Nairobi.

LETTER TO THE EDITOR

Sir,

FOSSORIAL SNAKE GIVES LIVE BIRTH

With reference to Stephen Spawls letter in the September *Bulletin* , James Ashe, when in charge of the Nairobi Snake Park, had sent to him a female example of nominate *Aparallactus jacksonii*, collected at the southern foot of Mt. Kenya. Shortly after receipt this snake gave birth to three very large size young (not measured), in appearance identical with their parent.

C.R.S. Pitman,
41 Queen's Gate Gardens,
London SW7 5NB

REQUEST FOR INFORMATION

FRESHWATER MOLLUSCS AND MAPS

I am studying the taxonomy and distribution of freshwater molluscs in East Africa, with particular reference to the intermediate hosts of Bilharziasis in Kenya. The 10 km squares of the Universal Transverse Mercator Grid provide a convenient means of mapping distributions (and classifying locality records), but apparently this grid is available only on maps of the 1:250000 Series Y503. There is a possibility that a map of more suitable scale for plotting extensive distributions, about 1:2000000 could be specifically prepared, and I would be glad if any members interested in using such a map would let me know their likely requirements. I would be very willing to identify freshwater shells and mussels sent with locality data.

D.S. Brown,
Medical Research Council Project,
Box 1971,
Kisumu.

- - - - - - - - - - - - - - -

SOCIETY FUNCTIONS

January 12/13th, 1974: Weekend at Cottar's Camp, 32 km from Mtito Andei on the Athi River.

Monday, 14th January, 1974: at the National Museum Hall, Nairobi. Mrs J. Rudnai will speak on "Lion Behaviour".

February 8th - 9th/10th, 1974: Weekend camp at Chemoni Estate, Nandi Hills: Leader Mr Duncan Cape. Campers should be self contained with all equipment including drinking water - firewood and washing water will be available. The Estate is 357 km from Nairobi on tarmac except for the last 5 km. The area consists of high altitude tea gardens, pasture and idigenous forest and borders the South Nandi Forest. If you wish to take part in this excursion, please fill in the enclosed form and return it to Mrs A.L. Campbell, Box Box 14469, Nairobi before 25th January. A route map will be sent to those participating.

Wednesday Morning Birdwalks: Meeting at the National Museum at 8.45 a.m. A Birdwalk will be held as usual on 26th December and throughout the rest of January.

- - - - - - - - - - - - - - -

IMPORTANT NOTICE

The Annual General Meeting of the Society will be held in the National Museum Hall on 11th March, 1974 at 5.15 p.m. Nominations for Office Bearers and Members of Committee and notices of matters to be included in the Agenda should be sent to the Secretary, Box 44486, Nairobi before 15th February, 1974.

- - - - - - - - - - - - - - -

RINGING NEWS

First, I must apologise for various mistakes in the 1971 - 1972 Report which was sent out with the December *Bulletin*. The most annoying mistake is that the left hand column of numbers ringed on pages 3 - 12 should have been headed '1971/72'.

The list of birds ringed (Table I) is very long and expensive to produce; the list would be even longer in the 1972/73 report because a number of 'new' species have been ringed. In the next report I propose that only the Palaearctic totals be listed in the table; should an Ethiopian species be recovered I will give the number ringed under the recovery details. I realise that this scheme may not meet with everybody's approval, please write to me if you disagree strongly and maybe a compromise can be reached.

A few recoveries are coming in, full details will be in the next Ringing Report. At last a Little Stint *Calidris minuta* has been recovered (or more correctly, controlled), in Zaire having been ringed at Magadi; a Swallow *Hirundo rustica* from Athi River was controlled in Kazakhstan and a Barred Warbler *Sylvia nisoria* ringed in Tsavo National Park was shot in Saudi Arabia. Three recoveries of foreign-ringed birds have been notified: an Algerian ringed White Stork *Ciconia ciconia* to Mau Narok, a South African ringed Ruff *Philomachus pugnax* to Butiaba in Uganda and a Swallow to Busia in western Kenya.

Graeme Backhurst,
Box 29003,
Kabete.

- - - - - - - - - - - - - - -

FOR SALE

Grampian Parabolic Reflector with DP 6 Microphone and leads etc. Contact: C.W. Barwell, Box 30470, Nairobi. Telephone 28776 Ext.46 or 22574.

- - - - - - - - - - - - - - -

SOME RECENT PERIODIC LITERATURE AVAILABLE IN THE LIBRARY

Bolton, M. 1965. Hartebeets in Ethiopia. *Oryx* 12:99.

Jarman, P.J. 1973. The free water intake of Impala in relation to the water content of their food. *E.A. Agric. For. J.* 38:343.

Marais, W. 1973. Notes on African Iridaceae. *Kew Bull.* 28:311.

Mittermeier, R.A. 1973. Colobus monkeys and the tourist trade. *Oryx* 12:113.

Owen, J.S. 1973. The Lamai wedge in Tanzania. *Oryx* 12:24.

Vaurie, C. 1973. So fair and foul a bird (the Hoopoe). *Nat. Hist. (New York)* 82 (6):60.

- - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS
BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings.

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

CONTENTS

Bats collected at Lake Rudolf - 14
A note on the Pintail Whydah - 15
A Buff-breasted Sandpiper at Kerio Bay, Lake Rudolf - - - - - - - - - - - 17
A further record of the Kentish Plover at Lake Rudolf - - - - - - - - - 18
At sea off Watamu - 19
Honey Badgers at Gedi - visitors or residents? - - - - - - - - - - - - - 20
Nest Record Scheme (Notice) - 20
East African Nest Record Scheme - 21
Probable Wedge-tailed Shearwater off Watamu - - - - - - - - - - - - - - - 23
Jamhuri Camp at Ng'oina Estate - 24
Flora of Upland Kenya - 25
Letters to the Editor - 25
Annual General Meeting - 25
Functions - 26
Library Notice - 26
Some Recent Periodic Literature available in the Library - - - - - - - 27
Editorial Notice - 28
New Members - 28
Photographic Exhibition - 28

BATS COLLECTED AT LAKE RUDOLF

While studying bird migration at Lake Rudolf in March 1972 (Fry, Britton, & Horne, in press) Dr C.H. Fry and Mrs J. Horne netted several bats which were sent to me. The names of these are listed below, with notes kindly provided by the collectors.

Only one of these species, *Nycteris hispida*, is recorded as having been collected at Lake Rudolf by Harrison (1960): two of the species, *Cardioderma cor* and *Nycticeius (Scoteinus) schlieffeni* are recorded by the same author from Lodwar. All but two of the Megadermatids have been deposited in the British Museum (Natural History) and were identified by Mr J.E. Hill. The specimens of *Lavia frons* and *Cardioderma cor* are catalogued in the University of Dar es Salaam Vertebrate Collection as numbers M-146 and M-147, respectively.

Family NYCTERIDAE: The hairy Slit-faced Bat *Nycteris hispida*. One on Central Island, 30th March 1972 in *Salvadora* thickets on the edge of Lake A; another at Ferguson's Gulf, March 1972 in *Acacia* thicket.

Family MEGADERMATIDAE: The Heart-nosed Big-eared Bat *Cardioderma cor*. One specimen taken at Ferguson's Gulf, March 1972 in an *Acacia* thicket.

The Yellow-winged Bat *Lavia frons*. One specimen taken at Ferguson's Gulf, March 1972 in an *Acacia* thicket.

Family VERSPERTILIONIDAE: The Banana Bat *Pipistrellus nanus*. Two specimens, one at Ferguson's Gulf on 19th March 1972 in dense *Acacia* thicket; the other at Kalakol, March 1972 in *Acacia-Salvadora* scrub.

Schlieffen's Bat *Nycticeius (Scoteinus) schlieffeni*. One specimen taken at Ferguson's Gulf, March 1972 in *Acacia* thicket.

K.M. Howell,
Dept. of Zoology, Box 35064,
University of Dar es Salaam,
Dar es Salaam, Tanzania.

REFERENCES:

Fry, C.H., Britton, P.L. & Horne, J.F.M. (in press). Lake Rudolf and and the Palaearctic exodus from East Africa. *Ibis*.

Harrison, D.L. 1960. A Check-list of the Bats (Chiroptera) of Kenya Colony. *Jl E. Africa nat. Hist. Soc.* 23:286-295.

Rosevear, D. 1965. *The Bats of West Africa.* British Museum (Natural History) London.

- - - - - - - - - - - - - - - -

A NOTE ON THE PINTAIL WHYDAH *VIDUA MACROURA*

During early November 1973, our bird-table at Karen attracted many birds, often over 100 Mannikins *Lonchura cucullata* and others but also Pintails in all stages of plumage, adult males in female-like part breeding dress to full breeding plumage. Young birds were also in the parties. Grain "Mwele" *Pennesetum typhoides* is placed on the table around lunch time so that we can watch the birds while having our mid-day meal.

It soon became obvious to us that there was a pecking order among the pintails with a dominant male in full breeding plumage. He was a real nuisance, repeatedly diving amongst and upsetting all the birds. He attacked his kind and others indiscriminately, seemingly for the 'fun of it' for he did little feeding. He attacked by diving down from his vantage point, the highest culm point of a bamboo. He drove off any bird that settled on this topmost culm, it was his territory not to be usurped by any other bird.

We got fed up with his persecution of the others and resolved to give him a lesson and take the 'micky out of him'. Cunning - he was cunning indeed. The mist net was erected between the bamboo and the table which is beside a small bush. He bounced off the net, got through the mesh or flew over or under it. We spent hours disentangling all the other birds, we were more concerned for their welfare than of his. Eventually he made a mistake and was in the net. We had pre-arranged his 'fate'.

With 7 to 9 males at the table it was difficult to identify a particular bird so we agreed that when caught, each male would be dyed a different colour. This was fine but it so happened that the dominant male was on his own when caught - we knew the aggressor so he was immediately dyed vermillion* (painted over all his white parts). A really splendid bird in his new colours but we asked ourselves "what is the purpose of the four long tail feathers? what do they signify and what effect do they have on him or others of his species or even on other birds?" So we decided to test this idea and so his four long tail feathers were cut off, even with the others. Off he flew to the tip top of the bamboo 'cocky as ever' and in no time was back again harassing the other birds, so we waited to see what would happen on his first encounter with the other 'lesser' males of his kind for there were still 6 to 8 of these around.

He was the most brilliant bird in Karen, outdoing the metallic shining Sunbirds. I have a notebook full of his doings. He could not care less about the loss of his long tail feathers and he continued to attack all and sundry as he wished and would be waiting on his bamboo as early as 06.15 hours to pounce on victims. We could see no reaction from the other males to this vermillion specimen - colour made no difference whatever.

To establish the pecking order it was essential to capture the other males in full breeding dress. We could identify those in part plumage. We netted two and they were dyed, one bright orange and the other sombre black all over. They were weighed and released.

---

* The dyes used were water soluble "photo-tint" preparations.

Two points of interest emerged from this experiment; first, we established the pecking order - 'orange' was No.2 and 'black' was No.3 but, in addition, the coloured birds continued activity as before - their new dress made no difference whether among their own kind or with the other bird species at the table. Second, dying the birds made no difference to their behaviour and appeared not to worry them in the least.

We noted one strange phenomenon, the tyrant 'vermillion' was never accompanied by a hen, the others were, either one or two hens and the tyrant would attempt to court these other hens. Wing flipping, tail dangling (but no long feathers to display!) hovering in flight in front of the females, but to no avail, they either left or were driven off by this activity, this was noted even before we had cut the tail feathers.

'Orange' was No.2 but no tyrant. 'Black' and the others kept out of the way while feeding at the table or on the ground for spilled grain but neither were real rascals. With display rather than with active attack, they made the others keep their place or distance but they seldom had much peace, for 'Vermillion' appeared ever present and he would dive down to assert his authority and scatter the lot.

Towards the end of December 'Vermillion's' colour began to fade, he was no longer the brilliant creature and at the same time his overlordship waned. He became a little less aggressive but he was still dominant. At this time all the other males had assumed full breeding plumage but were subservient. By the end of December 'Vermillion' disappeared and has not been seen since, however an old friend had returned at the begining of the month and now he was in full dress, this was 'Peg-leg', his left leg was missing but he visited the table regularly throughout the year. He and another late male were the only males at the table with neither appearing to be boss-bird but both would chivvy the horde of cheeky fighting mannikins when the table was full and overflowing with birds but both found that they could not outdo the Streaky Seed-eaters *Serinus striolatus* or the Reichenow's Weavers *Ploceus baglafect*.

L973 was a terrible year for lack of rain, less than half the mean at Karen. Yet why were the pintails in full breeding plumage when there were no obvious meteorological conditions suitable to trigger the onset of sexual activity and the assumption of breeding dress? The aviary birds have done the same. There were no potential hosts breeding in November and December that I could locate and it does not look as if January 1974 will be any more promising.

Rainfall at Karen is bimodal in a normal year yet we find males in full dress in March/April and again in November/December but does the individual change dress once or twice a year? With the aviary group there are always some birds in full dress in any month of the year. It is assumed that the onset of the rains stimulates birds to breed under local conditions, but the parasitic Pintail Whydahs must have hosts and these will not breed unless the conditions are right and this is generally during or after the rains; so with no rain why have the pintails assumed nuptial plumage? A question that can only be answered by observing marked birds and this is what we are attempting in the field and with aviary material.

In the aviary the birds have settled down with a few still willing to fight when in full dress but originally there was chaos amongst the birds and a few were killed. A *status quo* has been reached and despite the absence of potential hosts, the males assume breeding plumage, but irregularly, so what really is the stimulus?

G.R. Cunningham - van Someren,
Box 24947, Karen.

- - - - - - - - - - - - - - -

A BUFF - BREASTED SANDPIPER *TRYNGITES SUBRUFICOLLIS*

AT KERIO BAY, LAKE RUDOLF

On 8th December 1973 we had excellent views of a Buff-breasted Sandpiper on the west shore of Lake Rudolf, just north of the delta of the Kerio River, adjacent to the Fisherman's Cooperative. It was first seen crouching at rest among a mixed flock of Caspian Plovers *Charadrius asiaticus* and Kittlitz's Sand Plovers *C. pecuarius* on damp peaty flats bordering the wide and shallow Kerio Bay.

The bird at first glance gave the impression of a diminutive Ruff *Philomachus pugnax* but we quickly realised that it belonged to a species which we had not previously encountered. After several short flights it began to feed, in company with Curlew Sandpipers *Calidris ferruginea* and Little Stints *C. minuta*, on a dry area of close-cropped grass *Spirabilis spicata* near the water. We were able to watch the bird through X 10 binoculars at a range of about 25 m for at least half an hour, during which the following field observations were made:

Size similar to a Curlew Sandpiper. Build rather light with a noticeable upright stance on alighting but more crouched when feeding. Legs conspicuous ochre yellow in colour, rather long (similar in proportion to those of a Ruff), the gait distinctive with the feet raised high at each step. Bill fairly short, straight and dark. Head small, the eyes appearing to be somewhat protuberant; a noticeable pale-grey circumorbital ring. Wings and upperparts brown, with each feather clearly outlined in light warm buff, finely streaked with brown; the dark streaks extending downwards from the nape onto the sides of the upper breast. Rump and tail brownish, lacking any obvious markings. In flight, the margins to the wing feathers are clearly seen but there are no definite wing bars. Sides of face sandy buff with a suggestion of rufous on the ear coverts. Throat, breast and belly uniform buff, shading to white on the under-tail coverts. In some lights there is a faint suggestion of darker shading across the upper breast.

During feeding the bird walked about in a leisurely manner, apparently picking up insects from the ground among the grasses.

The Buff-breasted Sandpiper is a North American species which occurs only as a rare vagrant in the Palaearctic Region. Etchecopar & Hüe (1964) give two records from North Africa; the first by Meinertzhagen at Quseir, (= Kosseir?) Egypt, on the Red Sea coast, 21st February 1928 and the second by Castan at Gabes, Tunisia, on 8th December 1963. The present record appears to be the first from East Africa.

A.J. and J. Hopson,
Lake Rudolf Fisheries Research Project,
Fisheries Department, Ferguson's Gulf,
Private Mail Bag, Kitale.

REFERENCE:

Etchecopar, R.D. & Hüe, F. 1964 *Les oiseaux du nord de l'Afrique.* Boubée, Paris.

- - - - - - - - - - - - - - -

A FURTHER RECORD OF THE KENTISH PLOVER AT LAKE RUDOLF

Horne & Fry (1972) gave details of a Kentish Plover *Charadrius alexandrinus* which they observed at Ferguson's Gulf, Lake Rudolf on 19th March 1972. This was the first recorded occurrence of the species in Kenya. Almost a year later, on 16th March 1973, I saw two Kentish Plovers in the same locality, on the flats bordering Ferguson's Gulf. The two birds were standing in a large loose assembly of small plovers including 10 White-fronted Sand Plovers *C. marginatus*, about 35 Greater Sand Plovers *C. leschenaultii*, several hundred Kittlitz's Sand Plovers *C. pecuarius* and Ringed Plovers *C. hiaticula.* The Kentish Plovers were very striking in their full breeding plumage; black markings on the head restricted to a patch on the anterior part of the crown and a stripe through the eye; centre and hind portion of the crown light chestnut; remainder of the head, including the forehead, white; a small but conspicuous black patch on each side of the upper breast; legs dark.

The Greater Sand Plovers were also in full summer plumage, the males each with a chestnut breast band and chestnut crown with a white forehead bordered with black above and below.

A.J. Hopson,
Lake Rudolf Fisheries Research Project,
Fisheries Department, Ferguson's Gulf,
Private Mail Bag, Kitale.

REFERENCE:

Fry, C.H. & Horne, J. 1972. Kentish Plover at Lake Rudolf, a new species for Kenya. *EANHS BULL.*:139.

- - - - - - - - - - - - - - -

AT SEA OFF WATAMU

For the past many years we have spent Christmas at Watamu however, this year (1973) Kilifi was our venue for the fishing and we were out daily from 16th to 22nd December.

On our first four days out the most interesting birds at sea were Phalaropes *Phalaropus* sp. which we found in pairs or small parties of up to a dozen. As these birds were in winter plumage and as the patterns are so similar, positive identification was difficult though they were thought to be *P. lobatus*. We found them swimming, floating rather high out of the water or feeding and resting on clumps of floating seaweed. On the weed they actively probed, probably for crustaceans. They allowed very close approach to within a few metres before taking off. Their flight is rapid and generally low, just skimming the waves. We must have seen several hundred birds over the period but strangely after the 19th we failed to find any more either close inshore or well out to sea, 15 km or more.

Another bird that permitted close approach was the Shearwater *Procellaria assimilis*. These were numerous during the week and accompanied the many species of tern *Sterna* spp. hunting tiny fish. They fed floating on the water and appeared to take their food underwater, dipping the head repeatedly, often with the wings half stretched and almost diving. They did not circle overhead and dive for fish as did the terns but took food off the surface. It seemed that they were taking scraps or floating objects rather than chasing the quick-silver tiny fish.

Fishermen always watch out for flocks of terns as these usually indicate that they are feeding over shoals of small fish which in turn are chased by Bonito *Sarda* spp. or Yellowfin Tunny *Germo albacora* and these are good bait for Sailfish *Isiophorus gladius* and Marlin. The ornithologist fisherman enjoys the best of both worlds though the purist fisherman will say that all attention should be on the lines!

Conspicuous amongst the great mass of white terns, often several hundreds gathered over the fish, were the Noddies *Anous stolidus* in their sooty plumage with grey cap. We counted up to 40 birds at one time in a mixed flock. Terns are far from easy to identify from a pitching boat particularly as many were in part sub-adult plumage, however, the black-billed Little and Roseate Terns *Sterna albifrons* and *S. dougallii*, the yellow-billed Lesser Crested and Swift Terns *S. bengalensis* and *S. bergii* were present with the red-billed species Caspian and White-cheeked Terns *S. caspia* and *S. repressa*. In such numbers it is impossible to count numbers of each species.

Another ocean bird spotted was Leach's Petrel *Hydrobates leucorhoa* the forked tail and white rump being conspicuous as a pair manoeuvred among the wave crests, flying very low. We were about 15 km out to sea and north of Kilifi when we came upon these two birds. Parsons 1969 *Bull. Br. Orn. Cl.* 89:120-121 found the remains of a corpse of this species at Tiwi.

A strange sighting about 8 - 11 km off shore was a Carmine Bee-eater *Merops nubicus* which was heading, just above wave top, for the shore and just after this a small Lycaenid ("Blue") butterfly and a dragonfly were spotted.

On 21st December when about 8 km out and again north of Kilifi, we found ourselves surrounded by an immense school of Dolphins. We estimated that there must have been over a hundred of the animals. Many were babies a metre or less in length, leaping, twisting and turning amongst their parents and having such a wonderful game, much to our delight. It was fascinating to see these creatures swimming almost in contact, rising and diving in unison, often three or five together. A great Sailfish leapt clear amongst the dolphins and this naturally stirred the fisherman's instincts and all attention was paid to the trolling lines in the hope of a strike.

By the way, what are the species of dolphins to be found off the Kenya coast and what are the diagnostic characteristics ?

G.R. Cunningham - van Someren,
Box 24947, Karen.

- - - - - - - - - - - - - - -

HONEY BADGERS AT GEDI - VISITORS OR RESIDENTS ?

One evening in mid-August 1973, while visiting Gedi Ruins, I was sitting on the well by the Mosque of the long conduit and saw the backsides and tails of two sizable clawed mammals. They were about a third of the way from the bottom of the well and when one turned round in the crevice, it was possible to identify them as Ratels or Honey Badgers *Mellivora capensis*.
I watched them for about half an hour, from 6 - 6.30 p.m. I wonder whether any other members have seen this pair and if they are widespread along the coastal strip? They are not recorded in the checklist for Gedi in Williams' Field Guide to the National Parks of East Africa.

Valerie M. Martin,
St. Mary's School, P.O. Yala.

Galan Rathbun informs me (pers. comm.) that he never encountered Ratels during 21 months residence in the Gedi Ruins

Ed.

- - - - - - - - - - - - - - -

NEST RECORD SCHEME

Please send all completed 1973 cards as soon as possible to:

Hazel Britton,
Box 90163, Mombasa

- - - - - - - - - - - - - - -

EAST AFRICAN NEST RECORD SCHEME

I feel that it may encourage those who have gone to the trouble to send in nest record cards to know that some use has been made of some of them. I have recently been analysing the nest record cards for diurnal birds of prey for a paper I hope to submit to the next International Ornithological Congress in Australia later this year. They include over 730 records good enough for dating egg-laying with reasonable accuracy; and with other records available from the literature, I should be able to amass about 1000 records for analysis. Of the nest record cards anything from 25 - 100% are my own records, but other notable recorders include C. Smeenk, J.S.S. Beesley and A.D. Forbes-Watson, while there are older valuable and precise records from egg-collectors such as C.R.S. Pitman and V.G.L. van Someren. Egg records are particularly valuable as they enable an analyser to date the egg laying more precisely than do any records of advanced young in large diurnal raptors.

However it is surprising to find that:

1. Some species are very poorly represented even though common.
2. A fairly high proportion of the cards are so vague as to be meaningless. As a result they have to be discarded from analysis.
3. Only a few species (list below) have more than 20 records so that it is really worth analysing the results. These include a good many relatively rare but large and spectacular species which have attracted much interest. As I have said elsewhere, I am as guilty as anyone of neglecting common species such as, for instance, the Black Kite.

The actual number of good records for different species is summarised below:

1. 1-5 records; useless for analysis - *Chelictinia riocourii* Swallow tailed Kite (1), *Circus aeruginosus ranivorus* African Marsh Harrier (2), *Gypaetus barbatus* Lammergeyer (2), *Neophron percnopterus* Egyptian Vulture (2), *Circaetus gallicus* Short-toed Harrier Eagle (4), *Accipiter ovampensis* Ovampo Sparrow Hawk (1), *Accipiter badius* Shikra (1), *Accipiter minullus* Little Sparrow Hawk (2), *Accipiter rufiventris* Rufous Sparrow Hawk (1), *Melierax gabar* Gabar Goshawk (5), *Melierax metabates* Dark Chanting Goshawk (2) *Kaupifalco monogrammicus* Lizard Buzzard (5), *Buteo oreophilus* Mountain Buzzard (3), *Falco chicquera* Red-necked Falcon (1), *Falco biarmicus* Lanner (1).

   There is only one *doubtful* record for *Falco tinnunculus*, the common Kestrel, in East Africa!

Some of these I can myself augment from my own records or from the literature to raise them into the next category (6-10) but surely someone must have a few good records of such common species as the Gabar Goshawk, Dark Chanting Goshawk and Lanner, which is far commoner than the comparatively well represented Peregrine.

2. 6-10 records; can suggest the main breeding peak - *Gyps rueppelii* Ruppell's Griffon Vulture (9), *Torgos tracheliotus* Lappet-faced Vulture (9), *Trigonoceps occipitalis* White-headed Vulture (9), *Circaetus cinereus* Brown Harrier Eagle (8), *Polyboroides typus* Harrier Hawk (10), *Accipiter tachiro* African Goshawk (7), *A. melanoleucos* Great Sparrow Hawk (7), *Melierax canorus (poliopterus)* Pale Chanting Goshawk (8), *Falco rupicoloides* White-eyed Kestrel (8).

Most of these are comparatively rare species; but it should be possible to augment e.g. African Goshawk and Ruppell's Griffon Vulture (the records for the latter being heavily biased in favour of the Naivasha area) without too much difficulty. There are a large number of *Gyps* records from the Serengeti area, as yet unpublished, by D. Houston.

3. 11-20 records; should show a peak if any occurs - *Aquila verreauxi* Verreaux's Eagle (20), *Hieraaetus fasciatus spilogaster* African Hawk Eagle (17), *Lophaetus occipitalis* Long-crested Eagle (17), *Falco peregrinus* Peregrine (12)

The last named shows a beautiful peak of egg laying in August (10/12 records); all except the Long-crested Eagle are uncommon large species. In this category also comes *Hieraaetus dubius* Ayres' Hawk Eagle for which I have about 20 accurate records, not included above.

4. 21-50 records; good enough to show main analytical features and in some species to analyse by rainfall regions - *Elanus caeruleus* Black-shouldered Kite (24), *Milvus migrans* Black Kite (29), *Necrosyrtes monachus* Hooded Vulture (24), *Gyps africanus* White-backed Vulture (24), *Terathopius ecaudatus* Bateleur (26), *Buteo rufofuscus* Augur Buzzard (46), *Aquila rapax* Tawny Eagle (21), *Stepnanoaetus coronatus* Crowned Hawk Eagle (29), *Polemaetus bellicosus* Martial Eagle (34), *Sagittarius serpentarius* Secretary Bird (26).

Note that one of these (Black Kite) is the commonest and most obvious large bird of prey in Africa, breeding in every town; and that several large uncommon species are represented by far more records than their relative numbers would warrant on a fair sample.

5. 50-100 records; good enough for more detailed analysis by rainfall regions - *Aquila wahlbergi* Wahlberg's Eagle (52), only.

This species however, is a migrant, laying only between August and October irrespective of climatic conditions, apart from one June record from Tanzania.

6. Over 100 records; should be suited to detailed analysis - *Haliaeetus vocifer* Fish Eagle (153).

Unfortunately this sample does *not* give a good picture on detailed analysis as about 120 of the records come from Lake Naivasha (mostly my own) and others mainly from the Gulf area of Lake Victoria. There are only *two* records for

Lake Victoria in Uganda (although several pairs breed in Entebbe) and *none* for Lake Victoria in Tanzania, although many pairs breed near Mwanza, and the species is stated generally to breed on Lake Victoria in Tanzania from Mwanza - Musoma in May - October. The varying rainfall pattern on Lake Victoria would make analysis of many records of this species from this lake especially valuable. Surely someone has a few more *definite* records from Mwanza or Entebbe.

These remarks are not made in a spirit of criticism, but rather in the hope that people who may not otherwise feel inclined to take the trouble will realise that *someone* is making use of their data, and that they are not entirely wasted.

I hope broadly to correlate the seasonal breeding of birds of prey with the type of prey they eat and the time of maximum abundance and availability of preferred prey, where this is known. Thus, bird eating *Accipiters* and small falcons *should* lay during the rains, as their prey is most abundant immediately after the rains; but they don't always do so. In fact, there is an overall bias in bird eaters for laying in the dry season, so that laying date is not necessarily linked with most abundant food supply for the young.

L.H. Brown,
Box 24916,
Karen.

- - - - - - - - - - - - - - -

PROBABLE WEDGE - TAILED SHEARWATER *PUFFINUS PACIFICUS* OFF WATAMU

On 6th January 1974, when fishing about 4 km offshore, and about 5 km south of the mouth of Mida Creek, I saw a large dark shearwater which was probably this species. It flew within 200 m of the boat, but I was unable to catch it and view it at close range despite having a 33 h.p. engine; it was able to fly faster than I was able to plane. However, I saw it well enough to ascertain that it was about the same size, but with more slender wings than a Sooty Gull *Larus hemprichi*, and it would not have been large enough to be a Cape Hen *Procellaria (Puffinus) aequinoctialis* which is apparently the only other wholly dark brown shearwater likely to occur off our shores. *P. pacificus* breeds in the Seychelles; and Mackworth-Praed & Grant say that "its long thin-tipped wings give it a peculiarly hawk-like appearance in flight". This would agree well with the bird I saw, which also appeared to have a pronounced angle at the carpal joint of the wing when banking to turn, much more marked than in most shearwater or petrel species. I conclude that it probably was a Wedge-tailed Shearwater, but was not able to get close enough to make absolutely certain.

L.H. Brown,
Box 24916,
Karen.

- - - - - - - - - - - - - - - -

JAMHURI CAMP AT NG'OINA ESTATE DECEMBER 11th - 13th

While many people were celebrating the 10th Anniversary of Independence, a small group of the Society spent three days on the Ng'oina Estate near Sotik, Kericho District. Our host, Mr T. Walker, made our visit one of the most comfortable camps I have been to, providing sparkling new *choos*, plenty of water and firewood, and the industrious Geoffrey who helped us pitch our eleven tents in the shade of Jacaranda and Grevillia trees in a field just near the Walker homestead. Our leader Dr D. Dixon, made everyone welcome on arrival and took the "lone wolves" under his wing.

Early on Jamhuri Day (12th December 1973), a group of keen, aspiring ornithologists left in three cars for the airstrip, led by Geoffrey; later in the morning, our hosts took us around the estate. We drove to the top of Keritor hill, passing fields of *Caeselpina spinosa* from which steroids can be extracted and used in the production of "the pill"! From Keritor, there was a magnificent panorama across to the Nyando escarpment to the north west, and over Kericho district to the east. We then drove through woodland, crossing from Nyanza to Rift Valley Province and visited the nursery and "factory" where the bark of the cinchona is dried and the bark removed for the later extraction of quinine compounds. The medicinal value of this plant has been known for centuries by the Amerindians and was misnamed by Linnaeus after the Countess of Chinchon, wife of the Viceroy of Peru in the 17th century. It was used to cure her of a fever (malaria) and also later by other prominent personages such as Charles II. Cinchona is related closely to coffee, and plantations were then set up in Ceylon and the Dutch East Indies. During World War II many artificial quinine compounds were developed as communications were cut off, but our host finds that despite pharmaceutical competition, the natural source of these compounds makes a profitable export. In the nursery were rows of cuttings prepared for planting out to replace those bushes demolished for bark removal. The bush is ready for bark removal after six years of growth. We also visited part of the tea plantation and were instructed in the art of tea picking - two leaves and a bud - to produce the better blends!

In the early evening, a group of us went into the forest area to the west of the campsite for a bird walk and dudu crawl and in the evening chatted around a blazing campfire. Although no one professed to be " an expert" we compiled a list of 38 species of birds we had seen during our visit.

I would like to thank our host, Mr Walker, Geoffrey our tent raiser and Dr Dixon, our leader for a most enjoyable time. I am also pleased to see that another trip is planned on "this side" of the country in February, since this enables members of Western and Nyanza to join in.

Valerie M. Martin,
St. Mary's School,
Private Bag, P.O. Yala.

- - - - - - - - - - - - - - -

FLORA OF UPLAND KENYA

You may be interested to know that the project to produce a book covering the Flora of Kenya above 1000 m is now finalised. Some time ago Dr Agnew had a Ford Foundation Grant to do all the work and spent some years here. However, the grant did not stretch to publication and in view of the specialist nature of the book, the publishers could not undertake it without a subsidy. By various means we finally collected £2500, donations being made by a number of firms and individuals, and not least the Kenya Horticultural Society Council and Nairobi and Limuru Branches. Without all this generous aid, the book could not have seen the light of day.

It is now to be published in the Spring List of the Oxford University Press, which will ensure a high class production. In view of the very large scope, it will not be a cheap book and will probably cost about Shs.120/-. However, the Society will be able to purchase as many copies as it wants at Trade Prices, and these will be passed on to Members. You can therefore expect a circular on this subject in due course, which will enable you to place an order. This book will fill a long felt want.

L.A.S. Grumbley,
Box 42011,
Nairobi.

- - - - - - - - - - - - - -

LETTERS TO THE EDITOR

Sir,

On New Year's morning, at 6 a.m., I woke up in the Lobonar shelter on the summit of Nelion, Mt. Kenya, at an altitude of 5188 m. Looking out of one of the hut's little windows, I was rather surprised to see what looked like a crow flying just overhead. As I got out a few minutes later to collect some snow to make a drink, I saw a Pied Crow *Corvus albus* perched on the very top of Nelion. It flew away as I approached it. Could this be an altitudinal record?

Also, the peaks of Mt. Kenya are supposed to be bare of vegetation, but this is not so. The lichen *Rhizocarpum geographicum*, as well as other lichens which I could not identify, grow up to the very top of Batian, at 5199 m. On this last climb of the South West Ridge, I had occasion to observe *Senecio Kenyophytum* at more than 5000 m and a *Helichrysum*, perhaps *newii*, together with the grasses *Pentaschistis minor* and *Agrostis trachyphylla* which festoon the whole of the Standard Route on the East face of Nelion. I am sorry that the rather hurried nature of climbing does not tally too well with the painstaking observational one of the naturalist, but this is all I can offer.

S. Borruso,
Box 25095,
Nairobi.

ANNUAL GENERAL MEETING

The Annual General Meeting of the Society will be held in the National Museum Hall on 11th March 1974 at 5.15 p.m. Nominations for Office Beares and Members of Committee and notices of matters to be included in the Agenda should be sent to the Secretary, Box 4486, Nairobi before 15th February 1974.

As the Secretary, Miss Jean Ossent is relinquishing the post, nominations are requested for this position which carries a small honorarium. Someone with secretarial experience would be desirable although enterprise and ingenuity are also desirable attributes, as this is by no means a routine job. Any member able and willing to volunteer is urged to get in touch with Mr J.S. Karmali, Box 42202, Nairobi, Tel.46270 (mornings only) or with the Secretary.

- - - - - - - - - - - - - - -

FUNCTIONS

February 8th - 9th/10th 1974: Weekend camp at Nandi Hills. Please see Jan. *Bulletin.*
Monday, 11th February 1974 at 5.15 p.m. at the National Museum Hall: Mr John Hopcraft will give a lecture on Baharini Wildlife Sanctuary, Nakuru and will show a film on the bird life at Nakuru.
Monday, 11th March 1974 at 5.15 p.m. at the National Museum Hall: Annual General Meeting followed by a film by Alan Root.

NB. It is requested that members arrive before lectures start, as it is most disturbing for lecturers and audience to be interrupted by late comers.

Young children who are likely to get restless during serious lectures should not be brought. Complaints of disturbance have been received from members.

- - - - - - - - - - - - - - -

LIBRARY NOTICE

Several books, and periodicals are missing from the Library, having been taken out and not signed for. Those listed below are a few of them; a complete check would doubtless reveal more. The Librarian would like to appeal to anyone who knows anything about any of them to let her know, and also to appeal to borrowers to sign for anything they take and to return anything that they have at present which they took without signing for it. Even if they have every intention of returning it, much time and worry would be saved by giving a signature.

Annals of the South African Museum, bound Vols. Nos.52,54,56, Vol57, No.3.
(The loss of these bound volumes is especially serious. We have the complete set from Vol.3, 1905.
Journal of Ecology (Given by Dr Greenway) Vol58, No.1.

Natural History (New York) 1972, practically the whole volume has disappeared, only three issues being left out of ten. 1973, Nos.1 7 2. (I have written to New York and find that none of the missing issues is replaceable).
Oryx Vol.11, No.6 (the last issue but one).

- - - - - - - - - - - - - - -

SOME RECENT PERIODIC LITERATURE AVAILABLE IN THE LIBRARY

Akester, A.R., Pomeroy D.E. & Purton, M.D. 1973. Subcutaneous air pouches in the Marabou Stork *Leptoptilos crumeniferus*. *J. Zool* 170:493.

Brown, L.H., Powell-Cotton, D. & Hopcraft, J.B.D. 1973. The breeding of the Greater Flamingo and Great White Pelican in East Africa. *Ibis* 115:353.

Campbell, H.W. 1973. Observations on the acoustic behaviour of Crocodilians. *Zoologica N.Y.* 58:1.

Cox, N. & Young, J.O. 1973. A new species of *Hydra* (Coelenterata) from Kenya. *J. Zool.* 170:441.

Dupin, F. de S. Hétéroptères Hydrocorises de l'Afrique orientale. *Monit. Zool. Ital.* Suppl.5, No.1:1

Jarvis, J.M. 1973. The structure of a population of Mole-rats *Tachyoryctes splendens* (Rodentia: Rhizomyidae). *J. Zool.* 171:1.

Kaszab, Z. 1973. Beiträge zur Kenntnis der Meloiden (Col.) aus Ostafrika. *Monit. Zool. Ital.* Suppl.5, No.5:43.

Kock, D. Die Gattung *Hemimerus* Walker (Insecta: Dermapt.) ihr Wirt *Cricetomys gambienus* Waterhouse (Mammalia: Rodentia) in Ostafrika. *Senckenbergiana biol.* 54:1. 1973.

Manton, S.M. 1973. Arthropod phylogeny - a modern synthesis. *J. Zool* 117:111.

Merrett, N.R. 1973. A new shark of the genus *squalus* (squalidae: Squaloidea) from the equatorial western Indian ocean; with notes on *Squalus blainvillei*. *J. Zool.* 171:93.

Moriarty, C.M. & Moriarty, D.J.W. 1973. Quantitive estimation of the daily ingestion of Phytoplankton by *Tilapia nilotica* *Haplochromis nigripinnis* in Lake George, Uganda. *J. Zool.* 171:15.

Mutere, F.A. 1973. A comparative study of reproduction in two populations of the insectivorous bat *Otomops martiensseni*, at latitudes 1.5'S. and 2.30' S. *J. Zool.* 171:79.

Okia, N.O. 1973. The breeding pattern of the Soft-furred Rat *Praomys morio*. in an evergreen forest in Southern Uganda. *J. Zool.* 170:501.

- - - - - - - - - - - - - - -

NOTICE

It is very much regretted that this issue of the *Bulletin* has had to be printed on yellow paper; this is because no white duplicating paper is available in Kenya at present.

- - - - - - - - - - - - - - -

NEW MEMBERS - FEBRUARY 1974

Full members:

Mr Motokazu Ando, Box 40469, Nairobi.
Mr John D. Bell, Box 14385, Nairobi.
Mrs L.M. Berger, Box 29147, Nairobi.
Mr I. Douglas-Hamilton, Box 38, Naivasha, Kenya.
Miss Sylvia J. Dupre, Box 48121, Nairobi.
Mrs V. Halpin, Box 30465, Nairobi.
Mr W.J.E. Indge, Box 1020, Kianyaga, Kenya.
Miss C. von Kalckstein, Box 45895, Nairobi.
Miss Deborah Libby, 86 Bluff Avenue, Rowayton, Conn.06853, U.S.A.
Mrs B.B. Maloba, Box 30197, Nairobi.
Dr Derek E. Pomeroy, Dept. of Biol. Sciences, Kenyatta University College, Box 43844, Nairobi.
Miss Patricia Temple, Box 14921, Nairobi.
Tsavo Research Project, Tsavo East National Park, Box 14, Voi.
Wing Commander J.A. Worrall, Box 30465, Nairobi.
Dr & Mrs D.A. Wykoff, Box 30137, Nairobi.

Life member:

Mr Andre J.H. Moureau, Box 209, Kigali, Rwanda.

Junior members:

Jane Buckley, Box 48629, Nairobi.
Matt Vaughan, Bushwhackers, P.O. Kibwezi.

- - - - - - - - - - - - - - -

PHOTOGRAPHIC EXHIBITION

There will be an exhibition of colour photographs of birds, taken by our Chairman, John Karmali; in the New Stanley Art Gallery, Nairobi from 1st. February. The exhibition is expected to last for a few weeks.

- - - - - - - - - - - - - - -

QH
7
E135
S.I

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings.

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN MARCH 1974

CONTENTS

A probable Sandwich Tern on the Kenya coast - - - - - - - - - - - - - - - - - 30

Sandwich Tern on the Kenya coast - 30

A second Pomarine Skua on the Kenya coast - - - - - - - - - - - - - - - - - 31

Skuas at Lake Rudolf - 31

Further records of the Broad-billed Sandpiper from Lake Rudolf - - - 33

Lake Rudolf Buff-breasted Sandpiper - Correction - - - - - - - - - - - 33

Birds recorded on the Kimilili Track, Mt. Elgon, Kenya - postcript - 34

Exploitation of a food supply in a feeding association of Whydahs - - 35

First record of the Dwarf Slit-faced Bat *Nycteris nana* in Tanzania - 36

Nest Record Scheme - 37

Ringing News - 38

Expedition to Chemomi Estate, Nandi Hills, Kenya - - - - - - - - - - - 39

Reviews - 40

Exhibition of Bird Photographs by John Karmali - - - - - - - - - - - - 41

Letters to the Editor - 42

Society Functions - 44

Some recent Periodic Literature available in the Library - - - - - - - 45

New Members - 46

A PROBABLE SANDWICH TERN ON THE KENYA COAST

On 23rd and 24th April, 1973 at Jadini, south Kenya coast, I saw a bird which had the appearance of a normal Sandwich Tern *Sterna sandvicensis* in non-breeding plumage. On each occasion it flew along just off shore in the late afternoon, when the tide was fairly well in, to perch on a pole stuck up in the water about 40 - 50 m out. The forehead was white and there was black on the hind crown and around the back of the head. The bill was long and strong-looking and was distinctly black with a pale tip. It was this feature which drew my attention to the bird since it contrasted markedly with the Lesser Crested Terns *S. bengalensis* which I had seen frequently there. The bird seemed shy, for when I tried to get closer to it, it flew off. It also appeared to be solitary.

I am familiar with Sandwich Terns, having watched here in Devon at Dawlish Warren for many years as well as elsewhere, and I have no doubt at all that the bird I saw at Jadini was of this species. However, since learning that there is no previous record of the Sandwich Tern in Kenya I realise that there may not be enough detail in the description above to allow this record as the first for Kenya. I would add however, that even had I been fully aware of the species' rarity in Kenya, I could not have added anything much to my description without having a telescope at hand.

Graham Madge,
Firway End,
George Hill, Crediton,
Devon, EX17 2DS
England.

SANDWICH TERN ON THE KENYA COAST

The Sandwich Tern *Sterna sandvicensis* is a common migrant in southern Africa, regularly east to Natal; however, the two birds seen by Harvey (EANHS *Bull.* 1972:137) at Dar es Salaam in June 1972 and the record of Madge (above) south of Mombasa in April 1973 represent the only published records from East Africa.

While observing a resting flock of Lesser Crested Terns *S. bengalensis* and other larids at the mouth of the Sabaki River, near Malindi, on 22nd December 1973, I noticed an adult Sandwich Tern in non-breeding dress. I was able to observe it at rest for 15 minutes at ranges down to about 18m. There was no sign of it on two subsequent visits.

In size, shape and stance the Sandwich Tern was indistinguishable from the Lesser Crested Terns alongside. All were facing into the north-east monsoon so that neither species showed any 'crest'. The Sandwich Tern differed in being a pale silvery grey above, very much paler than the Lesser Crested Terns, and probably still paler than the Gull-billed Terns *S. nilotica* seen a few minutes earlier. The bill was long, black and rather slender, with an ivory or cream tip. Both at rest and in flight the primaries and the tips of the innermost secondaries appeared darker, more grey than the remainder of the upperpatrs. The black on the nape extended forward to beyond the eye, but was flecked white on the crown; forehead and forecrown were pure white like the underparts. Legs and feet were black.

These few sightings in Kenya and Tanzania (Harvey *op. cit.*) represent the only records of the Sandwich Tern on the east coast of Africa north of southern Mozambique.

Peter L. Britton,
Box 90163,
Mombasa.

- - - - - - - - - - - - - -

A SECOND POMARINE SKUA ON THE KENYA COAST

On 9th January 1974 I saw an immature Pomarine Skua *Stercorarius pomarinus* near Likoni Ferry, Mombasa, flying low over the water into a small party of Hemprich's Gulls *Larus hemprichii*, which it dispersed. It then soared rapidly upwards to such a height that it was no longer distinguishable as a skua, and then moved off southwards maintaining this altitude. This is the second record for East Africa, the first being that reported by P.& H.Britton 1974 (Pomarine Skua on the Kenya coast. *EANHS Bull.* 1974:4-5.).

The following notes I think suffice to eliminate the other species of skua, *viz.* Great Skua *S. skua*, Arctic Skua *S. parasiticus* and Long-tailed Skua *S. longicaudus*.

Larger than Sooty Gull, and perhaps almost as large as Lesser Black-backed Gull, *L. fuscus*. Wings pointed and narrow. 'Jizz' of Arctic or Long-tailed Skua, but without the light, bouncy flight of the latter. (The Great Skua is a massive-looking bird with rounded wings.) General colour dark brown, darker on head and mantle. Rump palish, barred dark. Tail dark and wedge-shaped with no sign of elongation of the central feathers. Underparts paler with pronounced barring on breast and flanks. White flashes in otherwise all dark wings were not large and pronounced as in Great Skua, but could be seen without difficulty.

Clive F. Mann,
Box 337,
Kapsabet, Kenya.

- - - - - - - - - - - - - -

SKUAS AT LAKE RUDOLF

During late September and early October 1973 at least two immature skuas were present in the vicinity of Ferguson's Gulf, Lake Rudolf. The first sighting was on 24th September when a dark brown skua, intermediate in size between a Grey-headed Gull *Larus cirrocephalus* and a Lesser Black-backed Gull

L. fuscus was seen briefly from R.V. HALCYON, about 1 km off Ferguson's spit, at rest on the water. At the approach of the ship the bird flew off in a south-easterly direction and was soon lost to view among the vast flocks of terns and gulls circling over the sand bars. The same bird was seen on several occasions up to the second week in October but it was only on the afternoon of 29th September that we were able to observe it at close quarters from the beach on the open shore to the east of the Lake Rudolf Angling Lodge.

Colour, mainly dark tobacco brown; a clearly-marked white stripe on the underside of the wing at the base of the primaries and whitish shading along upper ribs of primaries; two thin transverse bars (dark brown on a pale ground) on rump; under wings with clear but rather heavy barring of dark brown on a paler ground. Underparts plain darkish tobacco brown, shading to paler towards the rear, under-tail coverts pale brown with heavy bars of dark brown; bill and feet dark. Tail wedge-shaped with very small central protuberance; bill rather on the slender side.

The bird flew back and forth patrolling the shore and harrassing terns, particularly Caspian Terns *Sterna caspia* and during the intervals between sallies it rested briefly either on sand or on the lake just off the shore.

A second individual was seen flying over the shore stretch of road between the village of Kalokol and the west shore of Ferguson's Gulf, on the morning of 29th September. The entire head and throat were dark blackish-brown; underparts conspicuously white; upper wings all dark, underside of wings dark with clear white stripe at base of primaries; tail wedge-shaped with slight central protuberance. This bird was similar in size and build to the one seen near the Angling Lodge.

Immature skuas are difficult to identify in the field, but from their size it seems likely that the two birds seen by us were either Long-tailed Skuas *Stercorarius longicaudus* or Arctic Skuas *S. parasiticus*. A.D. Forbes-Watson observed a Long-tailed Skua at Ferguson's Gulf on 25th-26th August 1961 (Backhurst *et al.* 1973).

Patricia Robertson,
Lake Rudolf Angling Lodge,
Ferguson's Gulf.

Jane & Tony Hopson,
Lake Rudolf Fisheries Research Project,
Fisheries Department, Ferguson's Gulf,
Private Mail Bag, Kitale.

REFERENCE:

Backhurst, G.C., Britton, P.L. & Mann, C.F. 1973. The less common palaearctic migrant birds of Kenya and Tanzania. *Jl E. Africa nat. Hist. Soc. Nat. Mus.*

FURTHER RECORDS OF THE BROAD - BILLED SANDPIPER *LIMICOLA FALCINELLUS* FROM LAKE RUDOLF

The occurrence of Broad-billed Sandpipers *Limicola falcinellus* at Ferguson's Gulf, Lake Rudolf, has been noted in two previous communications (Hopson & Hopson 1972, 1973). Up to nine individuals were seen on various dates between 8th September and 15th October 1972.

More were seen during August to November 1973 and it appears that this species may be a regular visitor to this area on autumn passage in small numbers. The records are as follows:

19th August, one (summer plumage); 26th August, two (one summer, the other with pale grey winter plumage streaked with dark and with a dark patch on the carpal joint); 2nd September, three (one summer, two winter); 9th September, six (all summer); 30th eptember, one (summer); 9th October, one (transitional) 11th November, one (transitional).

Jane & Tony Hopson,
Lake Rudolf Fisheries Research Project,
Fisheries Department, Ferguson's Gulf,
Private Mail Bag, Kitale.

REFERENCES:

Hopson, J. & Hopson, T. 1972 Broad-billed Sandpiper at Lake Rudolf. *EANHS Bull.* 1972:170-171.

Hopson, T. & Hopson, J. 1973 More Broad-billed Sandpipers at Lake Rudolf. *EANHS Bull.* 1973:52.

LAKE RUDOLF BUFF - BREASTED SANDPIPER - CORRECTION

There was an omission in the description of the *Tryngites subruficollis* note which appeared in last month's issue (*EANHS Bull.* 1974:17).

The third paragraph, sixth and seventh sentence should read as follows:

Wings and upperparts brown, with each feather clearly outlined in light warm buff, giving a scaly effect similar to the upperparts of a Ruff. Crown and nape buff, finely streaked with brown;.

Editor.

- - - - - - - - - - - - - - - -

BIRDS RECORDED ON THE KIMILILI TRACK, MT. ELGON, KENYA — A POSTCRIPT

The following notes add materially to the data on four species discussed in our recent paper on Mt. Elgon birds (Britton & Sugg 1973).

Macronyx sharpei Sharpe's Longclaw : two specimens which we collected at 3400 m represent the only records from the mountain. We know of two further sightings; at about 3200 m on the Endebess track on 26th March 1972 by P.L.B. & C.F. Mann, and close to our collecting locality on 9th June 1972 by John Gerhart (*in litt.*). It is surprising that it has been overlooked for so long.

Cisticola hunteri and *C. chubbi* : data presented in our paper show that these are specifically distinct members of a superspecies. We noted that it would be interesting to show their respective songs on sonograms. Dr N.J. Skinner has since written to inform us that sonograms of the duets of both species are given in a recent monograph by Thorpe (1972). We have not seen the monograph, but Dr Skinner has kindly traced one example of each duet for us. As we predicted, the sonograms are very different, as are the songs themselves.

Nectarinia reichenowi Golden-winged Sunbird : a recent ringing recovery in Backhurst (1973) provides the first definite evidence of altitudinal movements by this species. A male ringed near Nairobi at 1600 m was recovered some three months later at South Kinangop, 65 km away at 2530 m. Circumstantial evidence of altitudinal movements in western Kenya is given in our paper, but only ringing can provide irrefutable evidence.

P.L. Britton,
Box 90163,
Mombasa, Kenya.

M. St.J. Sugg,
5 The Limes,
Hitchin, Herts SG5 2AY,
England.

REFERENCES:

Backhurst, G.C. 1973 East African ringing report 1971 - 1972. *Jl E. Africa nat. Hist. Soc. Nat. Mus.* 144.

Britton, P.L. & Sugg, M. St.J. 1973 Birds recorded on the Kimilili track, Mt. Elgon, Kenya. *Jl E. Africa nat. Hist. Soc. Nat. Mus.* **143.**

Thorpe, W.H. 1972 Duetting and antiphonal song in birds: its extent and significance. *Behaviour* Suppl.18.

- - - - - - - - - - - - - - - -

EXPLOITATION OF A FOOD SOURCE IN A FEEDING ASSOCIATION OF WHYDAHS, VIDUINES

The method by which Viduines search for food is by scratching about in the soil with either a rapid movement of one leg, in the manner of a domestic fowl, or rapid shuffling of both feet alternately then picking up the items so exposed. The purpose of this particular technique was brought to our attention when Ken Perry, a visiting ornithologist from Ireland and the writer were watching a mixed flock of whydahs feeding at a point along the Magadi road, Kenya.

On 14th April 1972, at 16.00 hrs. we rounded a bend in the road and disturbed a flock of Viduines which settled in trees and shrubs nearby, so we stopped and reversed to where the birds had been gathered. The birds returned quickly and congregated in a small area of a few square metres, amongst very dry clumps of the grass *Pennisetum mezianum* and sprawling *Cynodon plectostachyum*, neither of which carried seed heads.

The birds were so engrossed in scratching and feeding that very close approach was possible. We estimated over 100 male whydahs, in full plumage in the flock, feeding amicably, as we did not see any sign of agressive behaviour. The estimate was roughly 40% Pin-tail Whydah *Vidua macroura*, 40% Steel-blue Whydah *V. hypocherina* and 20% of the Straw-tailed Whydah *V. fischeri* which were accompanied by many, if not greater numbers of females. Similarity of female plumage made it difficult in the busy throng to distinguish the species well enough, despite bill colours or to estimate the numbers of each.

After watching and counting the birds, we disturbed this mixed flock, to try to ascertain what food they were taking but here we failed to find any obvious grain or insects, even by scratching in the grey dust.

The writer, however, when passing this same spot in July, found a dense growth of a sedge *Cyperus* sp. of which there was no sign in April (the months prior to April had been extremely dry). I believe it is now possible to suggest that the Viduines were seeking and finding the tiny hard nuts (fruit with one seed) of the sedge, which we could well have overlooked in the dusty soil in April. Whatever it was that these birds were taking was apparently of no interest to other seed-eating species which abound in the locality and more probably, it is postulated, these other species were unable to seek such, since they do not employ the scratching technique to expose seed; thus, this technique enables Viduines to exploit dry season food reserves which are unavailable to other Ploceiids.

The supply of the hidden reserves must have been considerable for each bird in this mass appeared to be finding food readily enough. *Cyperus* sp. nuts are extremely hard and durable and after shedding would probably not be taken by roving ants which would have taken the seeds of the two grass species. The nuts would eventually become trampled and buried by cattle. The mystery remains, how did the birds find the spot in the first place and

and know or suspect that so desirable a food supply was available in such quantity as to induce this large mixed flock of Viduines to gather.

The basic feeding habit draws a distinction between *Vidua* spp. and close relatives. The Viduines find food by scratching in soil or short grass and seeking any seed so turned up. The Indigo-birds *Hypochera* spp. and the Paradise Whydahs *Steganeura* spp. are also, to a limited extent, soil scratchers but seed is never in my experience taken by these directly from grass heads, sedges or plants, as do Wxbills *Estrilda* spp., *Amandava* or *Lonchura* spp. *Granatina*, the Grenadier to a limited extent feeds on the heads of certain grass species, but the Cordon-bleu *Uraeginthus* spp. and the Fire Finches, *Lagonosticta* spp. seldom if ever feed in such a manner and are ground feeders picking up exposed food stuffs without scratching. (I use the preferred older generic names as there are so many habit and biological differences amongst these small Ploceiids.)

G.R. Cunningham - van Someren,
Box 24947, Karen.

- - - - - - - - - - - - - - -

FIRST RECORD OF THE DWARF SLIT - FACED BAT *NYCTERIS NANA* IN TANZANIA

The Dwarf Slit-faced Bat *Nycteris nana* Andersen, is distributed in the forest zone of Africa from Ghana to Cameroun to southern and eastern Zaire; it is also found in south-western Sudan, western Kenya, and north-eastern Angola (Hayman & Hill, 1971).

A specimen collected in Gombe National Park (4.30'S., 29.40'E., altitude 780 m) appears to be the first record of the species in Tanzania.
The specimen, a female which was collected on 12th December 1970 when it flew into a lighted room, had the following measurements (in millimetres): forearm 35.1; total length 86; tail 40; ear 23; length of hind foot (c.u.) 9; tragus 3. The building where the bat was taken is in an area of mixed deciduous woodland near gallery forest. The bat carried two ectoparasitic *Eoctenes nycteridis* (Hovarth) (Hemiptera, Polyctenidae).

We gratefully acknowledge the help of J.E. Hill and A.M. Hutson, both of the British Museum (Natural History) who identified the bat and the ecto-parasites respectively. The bat has been catalogued in the British Museum as BM 1973.114.

K.M. Howell, Department of Zoology,
University of Dar es Salaam, Box 35064,
Dar es Salaam, Tanzania.

Richard Wrangham,
Gombe Stream Research Centre,
Box 185, Kigoma, Tanzania.

- - - - - - - - - - - - - - -

NEST RECORD SCHEME

Firstly I would like to remind all contributors to send in their records for 1973 as soon as possible.

With regard to Leslie Brown's article in last month's *Bulletin*, I would like to mention that this is not the first occasion that the data in our scheme have been used by an ornithologist or other research worker. As early as 1970 I started receiving requests for information. In all cases I have replied giving the data available from cards sent in by contributors. However, in some cases I am aware that the data I was able to supply were too scant to be of much help. But in other cases our contribution has added significantly to the work of the researcher. Below is a list of persons who have contacted me in connection with the Nest Record Scheme:

W.G. Swank	Game birds
A.M. Morgan-Davies	Red-headed Parrot *Poicephalus gulielmi*
N.J. Skinner	Grey-headed Kingfisher *Halcyon leucocephala*
G.R. Cunningham - van Someren	Parasitic birds
C. Smeenk	Birds of Prey
P. Mundy	Anteater Chat *Myrmecocichla aetiops*
- " -	Oxpeckers *Buphagus* spp.
D. Jackson	Nightjars, Caprimulgidae
R.K. Brooke	Swifts, Apodidae
C.F. Mann	Kakamega Forest birds and Cuckoos
E.K. Urban	Sacred Ibis *Threskiornis aethiopica*
C.R.S. Pitman	Winding Cisticola *Cisticola galactotes*
- " -	Verreaux's Eagle Owl *Bubo lacteus*
P.L. Britton	Yellow-vented Bulbul *Pycnonotus barbatus* and Nyanza birds
P.L. Britton & L.H. Brown	Terns and Gulls Laridae

Also in Brown's note he states "a fairly high proportion of the cards are so vague as to be meaningless". I think this comment is a little unfair as although they cannot be used for his analyses they could be of some value. For example, a record consisting of a date, locality, nest site and a comment such as "bird apparently incubating" or "large feathered young able to fly but dependant on parents", could be of use to someone studying the birds of that particular area or the nest site of that particular species, even though it is not possible to determine the laying date.

Lastly I would like to thank those members who send in cards regularly, whether their contribution is 5 or 100 per year. Last year I received between 800 and 1000 cards, but this figure is only a tiny fraction of what we could achieve. The Zambian Ornithological Society has recently started a Nest Record Scheme. From their Newsletter it is obvious that in proportion to the number of ornithologists, bird-watchers and naturalists in Zambia they are putting in more effort than we in East Africa. Perhaps this is because they are a smaller number of people and are actively and personally encouraged by the leading ornithologists. The most common excuse I am given for not filling in cards is 'but I am so busy, I just haven't got the time'. This is not really valid as some of the regular contributors are, in fact, some of the most industrious and busy members of our Society. In some cases I am embarrassed to ask members to fill in cards because they have to pay for them. However, the Zambian cards are more than double the price of our cards so this surely is not the reason. Can straddling the Equator cause such tropical lethargy?

I am an incurable optimist and hope that this note will prompt some of those members who have promised to fill in cards to actually get down to it during 1974.

Hazel Britton,
Shimo-la-Tewa School,
Box 90163, Mombasa.

- - - - - - - - - - - - - -

RINGING NEWS

In the January issue (*EANHS Bull.* 1974:11) I proposed that the next ringing report should only list Palaearctic species ringed, in the interests of economy; I asked ringers (and others) to write in with their views, but so far there has been very little response although one letter has been received and is included elsewhere in the present issue. PLEASE SEND IN YOUR VIEWS FOR AIRING IN THE NEXT *BULLETIN*.

In the next few days I will be sending co-ordinate forms to all ringers. Bob Spencer, the British Ringing Officer, has kindly given me a supply of these forms for our use in East Africa. I will be sending two forms to each ringer; please enter all your ringing localities (past and present) with their latitude and longitude co-ordinates. Please enter the District under the "County" column. Send one copy to me and keep the duplicate for yourself, I shall include a S.A.E. so please return the forms promptly. Thank you.

Finally, a request: over the years I have built up a substantial collection of ticks (Arachnida, Acarina, Ixodidae) from Kenya birds. In addition to my own material, valuable collections have been received from Peter Britton and John Harper. Ticks on birds are usually immature forms and should be kept alive; the most important point is to send the tick(s) off to me as soon as possible. Collecting tubes are bulky and fragile so ticks can be sent in crumpled tissue (e.g. toilet paper) in small boxes (e.g. match box, pill box etc.). When received they will either be put in an incubator to moult into adult ticks or, if the immatures are unengorged, they will be fed on a suitable host. The immature stages of many ticks are unknown according to the literature although I have accumulated a fair amount of information on some of these species which is awaiting publication. Any ticks received will be acknowledged as will the collectors' name in all publications but, at present, I can only deal with ticks collected from birds in Kenya.

Graeme Backhurst,
Box 29003, Kabete, Nairobi.

- - - - - - - - - - - - - -

EXPEDITION TO CHEMOMI ESTATE, NANDI HILLS, KENYA

8th - 10th FEBRUARY 1974

About 25 members and their children and guests took part in this expedition. The road was long, but tarmac all the way except for the last few miles which were on good estate roads, and people did the journey in about five hours running time. At Chemomi we occupied a delightful camp site beside the house of our host Mr Duncan Cape. The nights were cold at 1920 m but the weather was fine for the whole time of our stay.

The special interest of the expedition was that we had with us Mr Clive Mann, who put up nets in the forest and brought up by bagfulls birds that many of us never knew existed and were new to the lists of even the oldest among us. Members using due precautions could visit the nets, but the less energetic had only to sit on Mr Cape's verandah and watch the latest catch being ringed and measured before it was returned to its place and the next catch was brought up. In this way we were able to see at close quarters Cameroon Sombre Greebul *Andropadus curvirostris*, White-tailed Crested Flycatcher *Trochocercus albonotatus*, Black-throated Wattle-eye *Platisteira peltata*, two species of Robin Chat *Cossypha polioptera* and *cyanocampter* and many others. It was interesting that the Blackcap *Sylvia atricapilla* was frequently caught, and were the only Palaearctic migrants found in the middle of the forest.

At restless moments we could explore other parts of the forest for ourselves or potter about the garden and try to work out the difference between Eastern and Northern Double-collared Sunbird *Nectarinia mediocris* and *N. preussi*. A visit to a nearby dam gave an added feast of beauty. At a time when we are sad about the destruction of forests, these tea estates recur again and again to mind. I write as one totally ignorant of the principles involved; but no one can say that these estates have not been fully developed to the benefit of the whole economy. How is it then, that we can still lie in bed and listen to the cry of the Colobus and in the morning watch the eagles fly over? Why have these lines of forest been left alone along the valleys? Is it because the experts who supervised the clearing were interested in the difference between the Mountain and Scaly-breasted Illadopsis, or thrilled by the possibility of seeing a Green Hylia? Or was it because they wished to prevent soil erosion on the steep valley sides and preserve the water supply?

In some of the Mt. Kenya and Aberdare forests the same policy seems to have been followed. Round these stations at Ragati and Kamakia there are miles of softwood plantations, but we were able to indulge our taste for watching Mountain Yellow Warblers *Chloropeta similis* in the rest-house hedge and listen to the lovely song of the Abyssinian Hill-babbler *Alcippe abyssinicus* as it answered the tape-recording. Yet in the west the stream beds are choked with silt and rubbish (no doubt to be further polluted by the effluent from the paper mill) and I have seen Colobus sitting on the ground by the side of the road with not a tree standing behind them. The progress of the country cannot be held up for them, but might there not perhaps be still a place for them if modern principles of land use were followed?

P.M. Allen, Box 44486, Nairobi.

ARMY ANTS by T.C. Schneirla edited by Howard R. Topoff, W.H. Freeman & Co. San Francisco 1971 pp.349.

THE INSECT SOCIETIES by Edward O. Wilson, The Belknap Press of Harvard University, Massachusetts 1971 pp.548.

A CATALOGUE AND RECLASSIFICATION OF THE ETHIOPIAN ICHNEUMONIDAE by Henry and Marjory Townes, Memoirs of the American Entomological Institute No. 19.1973 Photolithoprinted, Braun-Brumfield, Michigan pp.416.

These three books recently received are of considerable interest and are available on loan to members on request from me, if they are not available in the Library.

Schneirla's ARMY ANTS is an extremely readable account of the biology and sociology of these ants and the work is the result of many years of study in the field, mostly on Barro Colorado Island, Panama, and in the laboratory from 1932 until his death in 1968. Dr Topoff, one of Dr Schneirla's students has admirably edited the manuscript and seen it through the press.

There is a wealth of information on the life and habits of the two major genera *Eciton* and *Labidus* and they are compared with other social ants in order to try to understand their behaviour, evolution and comparative psychology. Days and nights were spent following these creatures in the forest, for they are constantly on the move in the nomadic phase with a new bivouac each day, unlike our local *Dorylus (annoma) nigricans* but like our "safari ant" there is a static phase when the colony settles down usually under cover, and when the brood consists of only pupae and eggs. A similar cycle appears with *Neivamyrmex* and *Aenictus*, with the queen in the contracted state and the brood consisting of larvae for a period of some 18 days in the nomadic phase, followed by a similar period with the queen in the physogastric stage and producing eggs. In our local *Dorylus* all stages of brood are to be found at any one time and there is no cycle of activity.

This is a book that the student of insect social behaviour must read for it is full of detailed information on the evolution of the species and interactions between environment and genetic influences.

In INSECT SOCIETIES Dr Wilson provides the student with a great deal of fact concerning the biology of social insects, bees, wasps, hornets, ants and termites. Their social order, castes, inter-relationships, food, behaviour and even their predators, parasites, commensals, inquilines and other symbionts. The book is profusely illustrated with beautifully executed line drawings. Chapters are arranged firstly by insect groups followed by behaviour, food exchange, alarm and assembly, recruitment, recognition, grooming and the last chapters concern Homeostasis and the Superorganism, the genetic theory of social behaviour with Compromise and Optimization in social evolution. There are several references to the work by Schneirla and 44 pages of references.

Over the past two years I have collected ichneumonids and sent off over 600 to Professor and Mrs Townes, who are acknowledged specialists in this group of Hymenoptera, which are of world wide distribution and are important in biological control as they are parasitic.

Prof. Townes' catalogue and reclassification is a must for all entomologists working on this group and of course essential to any curator of museum collections, for this work brings order out of chaos.

It is surprising that only 198 known host species are listed for a known 1815 species of ichneumonid-fly, which goes to show how little we know of the biology of this group in the Ethiopian Region. A key is provided to the genera of the Ethiopian Region which is defined as Africa south of the Sahara plus Arabia, Madagascar and certain islands. There are 331 genera of which 163 have representatives in our faunal area, the Community. I have analysed these and find that Kenya has 90 genera and 187 species, Uganda 72 genera and 141 species while Tanzania is rich with 110 genera and 187 species; however, these do not compare with Madagascar with 468 species. Zaire is also rich. This suggests that much more collecting is required before we know how rich our fauna really is, for as Prof. Townes writes "perhaps 15% of those that actually exist in the area are known". He suggests therefore a staggering potential of some 11,980 species in the Ethiopian Region!

It would be an interesting exercise to study the zoogeography of these insects based on this catalogue as I noted that several species are recorded from Kenya and Madagascar or Tanzania and the islands, which raises the subject of affinities.

This revision and reclassification will require many amendments to the published literature, particularly to Le Pelley (1959) *Agricultural insects of East Africa*. In this work all names except two require to be changed, I have amended my copy, and have a list available should anyone wish to borrow it.

G.R. Cunningham - van Someren,
Box 24947, Karen.

- - - - - - - - - - - - - - -

EXHIBITION OF BIRD PHOTOGRAPHS BY JOHN KARMALI

We are accustomed to getting a great deal of enjoyment from our Chairman's photographs, so it has been a real treat to have some of those of which he must be specially proud displayed in an exhibition in the New Stanley Art Gallery. I have visited it myself four times. I am, of course, quite unable to judge the pictures from a technical point of view. I am sure that each one must have needed immense skill and patience; I can see that the colours have come out better in some than in others. The photograph has not done justice to the deep chestnut and slate blue of the Goliath Heron. The "Grey Heron" is...? Well...? It is a good photograph anyway! Perhaps Herons are not very photogenic, with their exaggerated length of bill and leg and conspicuous lack of space in which a brain might lodge. Ducks on the other hand are very photogenic, and the studies of Fulvous and White-faced Tree Ducks are specially charming. I hope I get the one that is being raffled in aid of Gertrude's Garden Hospital.

Pictures, whether photographs, drawings or paintings, must of course be judged differently according to the purpose that the artist has in mind. For illustrations in a book to help identify birds it is necessary above everything to be clear and to emphasise the points that an observer must look for. In a picture to live with something else is required, some fortunate moment of light or position bringing out the subject's special character, or forming a pattern, a composition as it would be called if the artist had made it himself. But for this, the photographer must wait with ever open eyes. All the birds photographed are magnificently alive; I think specially of the stout, aggressive-looking Holub's Weaver, the Streaky Seed-eater with its strong toes grasping a Protea, and the nervous highly-strung Yellow-necked Francolin on its log.

Turning to those forming a picture that one could live with, I think my favourite is the pair of Speckled Pigeons reflected in a pool. The front one has its eyes shut, as if the ecstasy of the draught blotted out all other senses. The one behind has its eyes open, watching. Next best I liked the Golden Weaver in dark reeds, the light catching the upper part of its body and its foot. But it is very difficult to choose. As a present for someone in England I ended up with the Naivasha Cormorant. (Copies are for sale).

P.M.A.

- - - - - - - - - - - - - - -

LETTERS TO THE EDITOR

Sir,

To the list of sightings of Frigate Birds *Fregata* sp. off Dar es Salaam I would add the following.

Since about the last week in November last year until now, the second week in January, we have seen frequently a solitary Frigate Bird in the area between Oyster Bay and the mouth of Mzimbazi Creek. Sometimes we have seen it four or five days in succession and then there has been a gap of a few days before seeing it again. With two exceptions the time has been somewhere between 4 and 6 p.m. and once at dusk at about 6.30 p.m. The two exceptions were about 7.30 one morning and about noon on another day. We were in the area almost every day driving into or out of Dar es Salaam along the coast road sometime between 4 and 6 p.m.

Unfortunately, being on other business, we have seldom had binoculars with us, but the general appearance of long black sharply angled wings and long forked tail is unmistakable. It was usually flying low enough for the white chest to be clearly seen. On two occasions when we did have binoculars the white was seen to extend a little on either side under each wing and there was a patch of greyish white in the middle of the chest. The undersides of the wings and belly were a very dark brown going to black at the tail. The bill was yellowish white, long, straight and sharply hooked. It has a long gliding flight with occasional movements of its wings and spreading of its deeply forked tail.

On the basis of the brief colour description given by A.D. Forbes-Watson in the *Bulletin* of April 1972:64 and the description given by W.G. Harvey in the *Bulletin* of August 1972:140 of his sightings over Dar es Salaam in June 1972 which he tentatively identified as an adult female Great Frigate Bird *Fregata minor* I would also identify the bird we saw through binoculars tentatively as an adult female Greater Frigate Bird. The sightings we made without binoculars were similar to the bird described above as far as we could tell, but it is not possible to say whether we have been seeing the same bird each time, though this may be likely in view of the frequency of sightings over this short period.

Finally, a point that may be of interest - while watching the bird through binoculars, twice it bent its neck and placed its bill under its left wing at the shoulder in an action rather similar to that of anting, but not drawing its bill through the feathers. Each time this took only 2 to 3 seconds, but it had no discernable effect on the bird's angle of flight and neither the wings nor tail appeared to move to counteract tha change in the centre of gravity caused by bringing its head and bill under its shoulder.

M.C.B. Williams,
Box 9182,
Dar es Salaam.

Sir,

I read, with concern, the suggestion (*EANHS Bull.* 1974:11) that the Ringing Report should be pruned to Palaearctic species only and those Ethiopian species which are recovered but rarely. I would consider this move detrimental to the Society's published records since the Report summarises the progress of, perhaps, the most important research project the Society supports.

The recoveries of Palaearctic species provide great interest, eminently worthy of publication, but we must not forget that the study of the migratory habits of the Ethiopian species within the Afro-Asian region is equally important although results have been astonishingly poor. However, the latter results must be published so that anyone, anywhere in the future may assess readily the numbers of Ethiopian birds ringed, the recovery rate and the geographical movements in order to plan further research on general or special topics; the information concerned could be lost, by some calamity (fire?, war?), if not published.

It would be interesting to know the extra cost of including the Ethiopian species in the printed report, since the printing costs of the whole Journal may be the real issue. Perhaps an expanded source of income (unpopular subscription increase?) is needed, otherwise, step by step, the Journal may be reduced to insignificance.

Meanwhile, if the Committee of the EANHS considers the Ringing Report too costly to print *in toto*, I would suggest that it is published as a separate number of the *EANHS Bulletin*, which I believe is a quotable publication; this would have the added advantage in that it could be published within a few months of the end of the ringing year.

John Harper,
Kericho High School,
Box 252, Kerichp.

- - - - - - - - - - - - - - -

Dr. BALLY

We are delighted to record that the University of Basle has conferred the Degree of Doctor of Philosophy and Master of Liberal Arts on Mr P.R.O. Bally, for his work on East African Succulents, the drawings as well as the text being specially mentioned. Dr Bally has been connected with our Society for many years, and was elected an Honorary Member in 1943 on the proposal of Sir Charles Belcher.

- - - - - - - - - - - - - - -

SOCIETY FUNCTIONS

Monday, 11th March 1974 at 5.15 p.m. at the National Museum Hall: Annual General Meeting, followed by the film "Box me a Bongo" by Alan Root.
(29th) 30th/31st March 1974: Weekend Camp at Minto Safaris near Naro Moru. The camp will be established near the Naro Moru River on the edge of the forest, and visits will be made to the lower Mt. Kenya forest. This locality should offer a good opportunity to study the forest, its wild life and birds. Fishing in the Naro Moru River will be available, if members possess a valid fishing licence. Landrover or similar vehicles will be necessary if members wish to explore the higher altitudes. Campers should be self-contained, but fire-wood and water is available. There will be a camping fee of sh.3/- per person. In addition there are three bandas equipped with beds and mattresses for members who may like to come but do not have tents. The charge for these are sh.7/50 per person. The camp site is situated 8 km from Naro Moru at an altitude of about 2300 m and will be signposted from Naro Moru. Members should make their own way to the camp site, any time from 29th March onwards. If you intend to take part in th is camp, please fill in the enclosed slip and return it to Mrs A.L. Campbell, Box 14469, Nairobi before 20th March 1974 and a map will be sent. Please do not bring dogs; barbeque equipment will be provided for Saturday evening, please bring meat and sausages for your own consumption.

Saturday, 6th April 1974: Afternoon visit to Mr & Mrs Alan Root on the shore Of Lake Naivasha. Details next issue.

Monday, 8th April 1974: at 5.15 p.m. in the National Museum Hall Members' s slide Show. Please bring 35 mm transparencies.

Mrs A.L. Campbell will be out of the country from April to September 1974. Please contact the Secretary Box 4486, Nairobi if you have any suggestions for camping trips, day trips or lectures.

- - - - - - - - - - - - - - -

SOME RECENT PERIODIC LITERATURE AVAILABLE IN THE LIBRARY

Ashford, Bray & Foster 1973. Observations on *Trapansoma boueti* (Protozoa) parasitic in the skink *Mabuya striata* and the sandfly *Sergentomyia bedfordi* in Ethiopia. *J. Zool.* 171:285.

Boulard, M. 1972. Classification raisonnée des Platypleures africaines (Homoptera Cicadidae). *Bull.Mus.Hist.Nat.Paris*, 3rd series, No.90.

Compagno, L.J.V. 1973 *Ctenacis* and *Gollum*, two new genera of sharks (Selachii:Carcharhinidae). *Proc. California Acad.Sci.* Vol.39:257.

Estes, R.D. 1973. Showdown in the Ngorongoro Crater (Grant's Gazelle). *Natural History, New York.* Vol.82:70.

Fain & Elsen 1973 Notes sur les Acariens parasites ou commensaux des mouches Tse-tses. *Acta Zool.Path.Antverp.* No.56:61.

Greenwood, P.H. 1973. A revision of the *Haplochromis* and related species (Pisces:Cichlidae) from Lake George. *Bull.Brit.Mus.Zool.*25

Groom, A.F.G. 1973. Squeezing out the mountain Gorilla. *Oryx* 12:207.

Holdich & Jones 1973. The systematics and ecology of a new genus of Sand-beach Isopod (Sphaeromatidae) from Kenya. *J.Zool* 171:385.

Keller, C.M. 1973. Montagu Cave in prehistory: a descriptive analysis. *Anthropol.Rec.Univ. California.* 28.

Myers, N. 1973. Leopard and Cheetah in Ethiopia. *Oryx* 12:197.

Smith-Vaniz & Staiger 1973. Comparative revision of *Scomberoides, Oligoplites, Parona* and *Hypacanthus* with comments on the phylogenitic position of *Campogramma* (Pisces: Carangidae). *Proc.Calif.Acad.Sci.* 39:185.

Trewavas, E. 1973. On the Cichlid fishes of the genus *Pelmatochromis*. *Bull.Brit.Mus.Zool.* 25, No.1.

- - - - - - - - - - - - - - -

NEW MEMBERS - MARCH 1974

Full Members:

Dr R. Adelhelm, Box 47051, Nairobi.
Mr Karl G. Andersen, Laboret Sec. School, Box 17, Turbo, Kenya.
Mr Eric Baumann, Box 23037, Nairobi.
Mr A.J. Carn, Box 1400, Nairobi.
Mrs Phyllida Cockell, Box 30345, Nairobi.
Miss Anne R. Cross, Box 30266, Nairobi.
Mrs Christine F. Gebbie, Box 47605, Nairobi.
Mr & Mrs J.H. Girling, Box 42726, Nairobi.
Mrs M.A.H. Harris, Box 30483, Nairobi.
Mr W.N. Holsworth, UNESCO, Box 30592, Nairobi.
Dr Peter Hoppe, Box 30197, Nairobi.
Mr M.E. Hopper, Box 30028, Nairobi.
Mr Peter G. Moll, Box 40106, Nairobi.
Mr C.R. Morrall, Box 301, Naivasha, Kenya
Mr E.H. Nightingale, C.M.G., Box 100, Naivasha, Kenya
Dr John D. Stewart, Dept. of Med., Box 30588, Nairobi.
Miss Irene W. Sedgwick, Box 40433, Nairobi.
Miss P.J. Vickers, Box 15538, Nairobi.

Junior Members:

Lisa Lackey, Box 30261, Nairobi.
Dilip Lakhani, Box 40140, Nairobi.
Davinder Singh Manku, Box 30604, Nairobi.
Ted Pottle, Box 42276, Nairobi.
Shamir Shah, Box 43579, Nairobi.
Jasbinder Singh, Box 30604, Nairobi.

Institutional Member:

McGill University, 8459 McTavish Square, Montreal 112, Canada H3A 1YT.

- - - - - - - - - - - - - -

INDEX

The Index for *EANHS Bulletin* 1973 will be published during March, subject to availability of paper.

- - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

CONTENTS

Waders at Dar es Salaam - 48

Great Black-headed Gull at Malindi - - - - - - - - - - - - - - - - - - 51

Observation on Sandgrouse at Seronera - - - - - - - - - - - - - - - - - 52

Miscellaneous notes on the behaviour of Kenya birds - - - - - - - - - 54

Hornbills and bats - 56

Ringing News - 57

Review - 57

Editorial note - 58

Letters to the Editor - 59

Request - 61

Functions - 61

Help with Functions - 62

Advertisement - 62

Wanted - 62

Library Notice - 63

New Members - 64

THE OCCURRENCE OF WADERS IN THE DAR ES SALAAM AREA OF TANZANIA - PART ONE

There is little on record detailing the occurrence of waders on the East African coast even though large numbers of Palaearctic waders pass through and winter in the area. With the current interest in wader populations and habitats in Europe (see BTO/RSPB Estuary Birds Enquiry and the activities of the BTO Wader Study Group) this gap will need to be filled in order to build up a realistic picture of world wader populations and their habitat preferences.

Of those species of wader known to occur on the East African coast most are dealt with in the standard reference books (e.g. Williams, Mackworth-Praed & Grant) but the information given is scanty and sometimes misleading. Even Moreau (1972) does not give much detail on Palaearctic waders in Africa although he draws attention to the gaps in current knowledge and some are filled by Backhurst, Britton & Mann (1973) in their comprehensive survey of less common Palaearctic migrants in Kenya and Tanzania. The only detailed published study is that of Fogden (1963) and that is only concerned with the Kenya coast north of Lamu for two months of one year (1961).

This paper is based on personal observations in the Dar es Salaam area between August 1970 and November 1973 on wading birds of the families Burhinidae, Charadriidae, Rostratulidae and Scopolacidae. During this period 370 visits, totalling over 500 hours, were made to wader habitats and at certain sites regular counts were made. The area concerned includes the coast from Mbegani (6.30'S., 39.E.) to Mboamaji (6.50' S., 39.E.) and the coastal hinterland, inland for about 15 kilometres.

Thirtysix species of wader are discussed including one (Oyster catcher) not personally recorded. Of these, twenty eight species are Palaearctic migrants and sixteen of these make up the great bulk (over 90%) of the waders in the area. This paper is therefore heavily biased towards a discussion of Palaearctis species, indeed, the majority of these families breed in the Holarctic.

After a general discussion of habitats and relative numbers, each species is dealt with separately. Some records of rare species have been published elsewhere and in these cases only a cross reference is given.

HABITAT PREFERENCES OF WADERS

The physiography of the coastline of the Dar es Salaam area is described in detail in *Tanzania Notes and Records* No.71 1970. Most of the coast is either low coral cliff with or without a narrow beach of sand or low sand barriers with broader beaches and backed with dry scrub, thicket or coconut palms. There are no large rivers but small streams enter the sea along this coast; sometimes as broad creeks fringed with mangroves and sometimes as lagoons intermittantly blocked by sand barriers. Most of the intertidal zone is eroded coral platform of varying extent and ending in a reef. In some bays and at the mouth of creeks there are extensive areas of sand and mud. Inland from the coastal strip there is often a broad area of salt flats fringed with acacia scrub. Where creeks penetrate this, and hence allow regular inundations of seawater, mangroves flourish in extensive stands and on their edges salt works with lagoons and pans are sometimes constructed where man controls the ebb and flow of the seawater. Inland, the main habitats are the seasonal pools and swamps, the rice paddies in the low lying areas, the sewage disposal beds and their outflow channels and, in a few places (as at Soga), more extensive pools with typical freshwater vegetation of reed and rush beds and waterlilies.

Most waders feed on the extensive tidal sandflats in the creek estuaries with smaller numbers on the coral platforms and along the coral coast. The mangroves are favoured by some species while the temporary brackish pools in the salt flats are particulary popular. Most species have been recorded at inland freshwater sites but total numbers are usually small and only a few species are found there for preference. A few species, for example some plovers, can be found in dry habitats such as on the dry salt flats and short grass.

The salt pans in the mangrove zone are the main roosting area for waders from all these feeding habitats. A number of waders are present all through the day, feeding and resting there, but at high tide and in the evening they are augmented by much larger numbers. When the high tide is spring and occurs in the late afternoon I estimate that about 90% of the wader population collects at the salt pans along this coast, for in these circumstances there are very few roosting sites on the littoral and even such marine waders as Sanderling and Turnstone will move inland. There are important salt pans and associated lagoons at Mjimwema, Msasani, Kunduchi and Kerega/Rasluale and it is here that most of my observations and counts have been made. The waders gather in tight flocks on the low embankments and along the edge of the lagoons and if the timing is right they are loathe to fly. It is therefore possible to get reasonably close to them and to count the birds at leisure. Observations have also been made regularly at the main feeding sites, particularly the extensive tidal sand flats of Ocean road, Selander Bridge (Msimbazi Creek) and Ras Kiomboni but it is difficult to count birds here.

NUMBERS OF WADERS

In the species list that follows, an attempt has been made to give some idea of the size of the flocks in the area. A flock would be the total number of waders at one roost or in one feeding area (e.g. in the whole of Selander Bridge estuary). Maximum numbers were almost always obtained at spring tide roosts at salt pans. The significance of these roosts is such that one would get a reasonably accurate idea of total wader population in the Dar es Salaam area by counting all the waders at the four salt pans at a spring tide roost in the late afternoon.

Unfortunately I have not been able to do this but by collating information from different roosts I have arrived at the following figures for total wader populations in the area throughout the year.

Peak passage (September)	8 - 10000 birds
Peak wintering (January)	4.5 - 6000 birds
Peak passage (April)	4.5 - 6000 birds
Peak summering (June)	1 - 1500 birds

These are 'guestimates' but they do give an idea of the order of the total size of the local population.

THE WADER YEAR

Only three species of wader have been proved to breed in the area and they breed at the end of the long rains from June to August. It is likely that the two or three species which probably breed also do so at the same time.

My observations have shown that the movements and relative numbers of Palaearctic waders do not reflect a simple process of migration. It is convenient to begin the year in May after most of the 'spring' passage birds have passed through. Indeed, it is towards the end of this month that the lowest numbers and smallest variety of species are recorded. However during June and July wader numbers vary considerably from week to week and at times quite large flocks of oversummering individuals occur. The change in flock size from week to week reflects, I think, the movement of oversummering flocks up and down the coast. There is also considerable variation in the size of these flocks from year to year as is indicated under the individual species. Over 90% of the birds are in non-breeding dress and I think are probably young birds bred the year before rather than delayed adults. Indeed for several species, particularly some sandpipers, these summer flocks can equal 15% - 20% of the peak wintering flocks. This implies more than chance oversummering of stragglers. It may be, in the most northerly populations at least, (i.e. those whose migration route is longest and whose breeding season most limited) that the birds do not breed until they are two years old or even that they only breed every second year.

The first signs of return passage, usually adults in complete or partial breeding dress, comes in early July and by the end of the month return passage is in full swing. August is the peak month for flock sizes (when the great bulk of the migrating waders are Little Stints and Curlew Sandpipers) and from July to September it is interesting that these passage flocks favour brackish pools in the salt flat/mangrove zone rather than the tidal sand flats. In several species, particularly Greater Sand Plover, there are two or more distinct waves of migration possibly indicating different origins for the migrants. In most species the first migrants precede the main arrivals by 6 or 8 weeks and this is particularly marked with the plovers, whose peak migration is about a month later than that of Curlew Sandpipers and Little Stints.

During October and November total numbers drop off although at this time and into December and January the less common species such as Bar-tailed Godwit, Little Ringed Plover and Redshank, often occur. Numbers remain fairly constant from November to mid-March for most species apart from local movements. In late March and early April there is a very brief build up during the return passage, but movement through the area is very rapid and numbers tail off towards the end of April.

OTHER SPECIES

Other wader species are likely to occur in the area as vagrants or very scarce passage migrants. It is rather surprising that the Dunlin *Calidris* *alpina*, which is such a common Palaearctic species, can be no more than a vagrant to Dar es Salaam if it occurs at all. I have searched carefully for it without success. I have also looked for the Kentish Plover *Charadrius alexandrinus* which is supposed to occur and altough male White-fronted Sand-plovers (which are very closely related) in full breeding dress can look very like Kentish Plovers, I have no evidence that the latter occurs.

W.G. Harvey,
British Council,
Djalan Imam Bondjd,
57 - 59 Djakarta,
Indonesia.

(To be continued)

- - - - - - - - - - - - - -

GREAT BLACK - HEADED GULL AT MALINDI

The Great Black-headed Gull *Larus ichthyaetus* breeds in the central Palaearctic and has been recorded once in East Africa, at Entebbe in Uganda (Pearson 1971, Mann 1971, Backhurst, Britton & Mann 1973). Turner (1973) felt reasonably confident that two birds seen recently at Lake Nakuru, Kenya were this species; but they may perhaps have been Herring Gulls *L. argentatus* (see P.L.B's letter in this issue). The great Black-headed Gull winters in the Red Sea where it has been described as uncommon by Moreau (1972) and rare by Urban & Brown (1971). Though a regular winter visitor to India and northern Ceylon (Henry 1971), it can be no more than a rare vagrant in our area.

On the morning of 19th January 1974 we found an immature Great Black-headed Gull at the mouth of the Sabaki River, near Malindi, Kenya. It stood out from a large flock of gulls and terns at considerable range, and despite the lack of detail we decided that it was this species, which P.L.B. had seen in India in early 1973. A rising tide disturbed the flock, and though most individuals settled again, this bird flew strongly out to sea. Fortunately the bird was encountered a few hours later along with four other gull species on the beach alongside Malindi Fish Market, only a few kilometres away. Here it was watched at leisure at ranges down to 25 m. It was never seen again at Malindi but was seen and photographed at only 20 m range at the Sabaki River mouth by P.L.B. and Mrs Hazel Britton on the evening of 2nd February. It thus stayed in the vicinity of Malindi for at least two weeks, but was not seen on three subsequent visits in February and March, nor on several earlier visits (the latest on 4th January). Black and white photographs at rest and in flight show several diagnostic features.

It was decidedly larger than two Herring Gulls standing alonside, these themselves being larger than a number of nearby Lesser Black-headed Gulls *L. fuscus*. It had a heavy, bull-necked appearance, with a hardly sloping forehead; a heavy greyish bill with a black bar across both mandibles near the pink tip; greyish legs, brown iris. The head was white with a dusky area behind the eye, extending fully around the back of the head, but only well marked for a few centimetres behind the eye. Immediately below the eye, in fact adjoining it, there was a very well marked dark area. An extensive area of grey flecks on the lower nape was lower down and independent from any head markings. The mantle was mainly pale grey, the colour of nearby Black-headed Gulls *L. ridibundus*, not as dark as even the palest of the Herring Gulls. Primaries appeared to be dark brown at rest. In flight the whole wing was grey with pale brown markings, forming somewhat irregular lines along the wing. There was some white edging to flight feathers in the vicinity of the middle primaries. Tail and upper tail coverts were white, with a broad black band at the tip of the tail.

Peter L. Britton,
Box 90163,
Mombasa, Kenya.

Philip Duffus,
c/o Vet. Res. Laboratory,
P.O. Kabete, Kenya.

REFERENCES:

Backhurst, G.C., Britton, P.L. & Mann, C.F. 1973. The less common Palaearctic migrant birds of Kenya and Tanzania. *Jl E. Africa nat. Hist. Soc. & Nat. Mus.* 140.

Henry, G.M. 1971. *A guide to the birds of Ceylon.* London : O.U.P.

Mann, C.F. 1971. Distributional notes on some Uganda birds. *Bull. Br. Orn. Club* 91:111-113.

Moreau, R.E. 1972. *The Palaearctic - African bird migration systems.* London : Academic Press.

Pearson, D.J. 1971. The occurrence of a Great Black-headed Gull *Larus ichthyaetus* in Uganda. *Bull. Br. Orn. Club* 91:171-172.

Turner, D.A. 1973. A new gull for Kenya - *Larus ichthyaetus* ? *EANHS Bulletin* 1973:138-139.

Urban, E.K. & Brown, L.H. 1971. *A checklist of the birds of Ethiopia.* Addis Ababa : Haile Selassie I University Press.

A BRIEF INTERESTING OBSERVATION ON SANDGROUSE AT SERONERA RIVER - POOL

The Seronera River in the Serengeti National Park, Tanzania starts in the south-eastern part of the park, and runs to the north to join the Orangi River which flows westwards into Lake Victoria. Regular smaller rivers occur on both sides of the Seronera, flooding it in the rainy seasons. This big river does not flow in the long dry season, but as it dries up leaves many pools along its course. These pools become the favourite drinking points for both mammals and birds.

During the months of June, July and August 1973, two species of Sandgrouse: Yellow- throated *Pterocles gutturalis* and Chestnut-bellied *P.exustus* were the daily morning visitors to one of the river pools. The pool was surrounded at one side by tall aquatic reeds *Typha* spp. and with tall trees of *Acacia* spp. The southern bank, however, was a shallow sandy shore, gradually rising into an open grassland plain. That provided the most favoured landing point for the Sandgrouse during their drinking visits. The pool lies about 6 km south of Seronera camp, beside the Seronera River drift on the Seronera to Arusha road.

Sandgrouse came in from the vast open grassland plains, stretching to the east and southern sides of the river. Arrivals of Sandgrouse started as early as 07.00 hrs on each observation morning. Arrivals were either of a pair, or flocks of ten to fifty birds and even more sometimes.

There was a chosen site, some hundred metres away from the river pool, where the birds congregated first while waiting for more participants to arrive. They pecked on short dry grass while on the waiting site.

The drinking behaviour of these birds was very interesting indeed. When the number of birds at the congregating site reached about two hundred they would start to fly in to the pool to drink in alternate flocks. The larger ones (Yellow-throated) took the first opportunity into the water pool, followed by the smaller Chestnut-bellied, and towards the end of what I can call the drinking ceremony, mixed parties of both Yellow-throated and Chestnut-beilied followed. The most interesting sight was at the water-pool when the birds went in in alternate flocks, each flock highly respecting the other. The drinking flock would fly off the water immediately in order to give way to an advancing flock. Sometimes a flock had scarcely drunk a drop of water when another one advanced, in that case, the "hosts" had to fly off the water, and round in circles, then back to rejoin the waiting congregation, where they patiently waited for another opportunity to fly into the pool. Meanwhile, more birds would still be arriving at the waiting site from the plains.

Once one flock had quenched its thirst, the birds would fly straight away back to the plains, making a lot of noise, and as they got further away and higher they split into pairs and small flocks of five or more birds. Obviously the birds came from long distances to drink, for as I watched them flying, with binoculars, they kept on flying until they disappeared in the blue sky. There were no birds to be seen in the water-pool towards 09.00 hours on a clear sunny day, but the time would change to 10.00 hours on a cool cloudy morning.

ADDITION

Towards the end of August, Chestnut-bellied Sandgrouse started mating and as a result of that, the drinking behaviour slightly changed. The birds became very restless at the water- hole and congregations at the waiting site became very sparse.

Sifaeli A. Mungure,
Arusha National Park,
Kusare Research Camp,
Box 3134, Arusha.
Tanzania.

- - - - - - - - - - - - - - -

MISCELLANEOUS NOTES ON THE BEHAVIOUR OF KENYA BIRDS

DISPLAY OF OSTRICH *STRUTHIO CAMELUS MASSAICUS*

On 3rd August 1961 a male was seen to run several hundred metres towards a female; it then squatted on its tarsi, bent its head backwards and rubbed it across its back, at the same time spreading its wings *alternately*. The female took little notice.

NEST POSITION OF HAMMERKOP *SCOPUS UMBRETTA*

It is stated in both Mackworth-Praed & Grant, and in Dr Austin Roberts' Birds of South Africa, that the nest opening of this bird is *always* on the most inaccessible side, and, in Mackworth-Praed & Grant only, that the nests are from 4.5 to 12 m from the ground. However, I found a nest near Konza on 30th September 1961 that was only about 2.5 m from the base of a leaning tree, and which had the entrance hole in the easiest position for access so that I could put my hand in without difficulty.

FEEDING METHOD OF YELLOW-BILLED STORK *IBIS IBIS*

A party of ten feeding, or attempting to, at Lake Nakuru on 20th November 1960 were standing in shallow water with their bills wide open and the tips of the mandibles apparently touching the mud at the bottom. Presumably they were waiting for a fish or frog to swim between the mandibles whereupon they would snap them together, but this was not seen actually to occur.

NESTING OF SACRED IBIS *THRESKIORNIS AETHIOPICUS*

On 17th June 1962 there were three nests in a seasonal swamp west of the Ngong Hills. The nests were piles of dead vegetation where the water was about 40 cm deep, and were so close together that the young birds could scramble from one to the other. There were several young altogether, all unfledged, and two of them were too small to stand at that date.

FIGHTING OVER FOOD BY TAWNY EAGLES *AQUILA RAPAX*

On 21st October 1962 near Ol Orgesaillie a Tawny Eagle flew down into a donga holding what looked like a rat in its feet. Almost immediately four more Tawny Eagles flew down "out of the blue" and tried to wrest the rat away from the original possessor who, however finally managed to swallow it. It would appear that these birds sometimes keep a close watch on each others' hunting efforts.

COITION OF LAMMERGEIER *GYPAETUS BARBATUS*

On 8th April 1962 coition, or attempted coition, was observed at 07.00 hours on a very cold and misty morning high on the cliffs of "Hell's Gate" near Lake Naivasha. The event struck me as surprising in view of the time of day and the conditions.

MIGRATION OF AFRICAN CRAKE *CREX EGREGIA*

One found dead on 1st June 1962 in the centre of Nairobi, had presumably struck a high building during the night while migrating.

REACTION TO DANGER OF GREENSHANK *TRINGA NEBULARIA*

In Nairobi National Park on 18th November 1950 a crocodile was lying on the bank of one of the dams with its head close to the water's edge. Two greenshanks which were feeding their way along the water's edge refused to pass in front of the crocodile but instead, one flew over it and the other made a detour on foot right round its tail.

CALLS OF THE CRAB PLOVER *DROMAS ARDEOLA*

I have heard the following calls of this bird on the coast near Mombasa: (a) a nasal "ee-ow" or "yow", (b) a quiet rather high-pitched whinnying and (c) a low Coot-like noise, harsh but not loud.

FOOD OF PIED KINGFISHER *CERYLE RUDIS*

The authorities all state that the food of this bird consists entirely of fish, but I have seen the bird on one occasion, hovering over level, rough, dry grassland by Lake Naivasha as if seeking some other sort of food. Further observation seems desirable.

COURTSHIP FEEDING OF PIGMY KINGFISHER *CEYX PICTA*

On 8th May 1959 I saw two birds of this species perched on a low branch in Karura Forest, Nairobi, well away from any stream. One, which had a red bill, was holding a butterfly. The other, which had a pale bill, and was therefore presumably a female, (the young are stated to have black bills) sidled up to the first bird and apparently solicited food by dipping its bill and wagging its tail. The (assumed) male thereupon fed the butterfly to the other.

CHANGE OF HABITAT OF BLUE-NAPED MOUSEBIRD *COLIUS MACROURUS*

In July 1961, during the very severe drought, this species extended its range from the hot, dry acacia country of the Rift Valley up to the neighbourhood of Nairobi at an altitude of 1680 m. Presumably this would be due to the drying up of edible vegetable matter at lower altitudes.

STEALING OF NEST MATERIAL BY WHITE-BELLIED TIT *PARUS ALBIVENTRIS*

On 8th May 1959 a Collared Sunbird *Anthreptes collaris* was building a nest in Karura Forest, Nairobi, but almost as fast as it brought material, apparently vegetable down, a White-bellied Tit flew down and removed it in large beakfuls.

EXTENSION OF RANGE OF YELLOW-BILLED OXPECKER *BUPHAGUS AFRICANUS*

In August 1961, during a period of severe drought, this species appeared in Nairobi National Park where I had never seen it before. Was the reason in this case that in its normal habitat the drought had reduced the number of cattle and game animals, with their supply of ticks to an inadequate level, or were the birds forced to move by a shortage of drinking water?

COLLECTION OF SPIDER'S WEB BY COLLARED SUNBIRD *ANTHREPTES COLLARIS*

On 21st May 1959 I saw a sunbird, apparently of this species, swinging on an invisible thread high up in a tall tree in Karura Forest. After fluttering on the thread for several seconds it appeared to break loose and flew away. I suppose that what was happening was that it was trying to break off a piece of the strong spider's web for its nest. There is a lack of records of the method by which birds collect and manipulate this difficult substance.

VOMITING BY GOLDEN WEAVER *PLOCEUS SUBAUREUS*

On 6th May 1959 at Hunter's Lodge by the Kiboko River on the Nairobi - Mombasa road, a Golden Weaver dashed against a window, knocking itself unconscious. We placed it on a table where it lay for a short while with its toes curled up. When it recovered consciousness it vomited, much to my surprise, before flying rather weakly off.

PLAYGROUND OF JACKSON'S WIDOWBIRD *EUPLECTES JACKSONI*

At the beginning of June 1959 there was a large playground of the males of this species actually within the Nairobi City boundary, between Nairobi Wilson Airport and the entrance to the National Park. As I had not seen it there before, or since, presumably the choice of a site is casual.

Henry J. Lee,
42 Crofton Road,
Ipswich, Suffolk,
England.

HORNBILLS AND BATS

With reference to Mrs Kingdon's interesting note about Silvery-cheeked Hornbills *Bycanistes cristatus* attacking roosting Lesser Fruit Bats *Epomophorus labiatus*, the following incident which took place in an Entebbe (Uganda) garden may be worth recording, although it has already been mentioned in the 1935 Annual Report of the Uganda Game Department, paras.300-302, and in *A Game Warden takes Stock* (1940) pp.257-258.

The Hornbill in question is the large and extremely noisy Black and White Hornbill *Bycanistes subcylindricus*, a common species in the Botanic Gardens and in the residential area. It frequently captures fully-grown specimens of the smaller birds by 'crash' tactics, hurling itself at its intended victim in the hope of knocking it off its perch and catching it before it can recover - an operation which is extremely clumsy and apt to be rather noisy. One day at noon I watched a male Black and White Hornbill crash into the canopy of a large mango tree, temporarily felling a roosting Dog-faced Fruit Bat *E. anurus* which immediately recovered itself and dodged into a hedge only to be assaulted further and eventually captured. The bird's efforts to deal with its victim were most comical - taking nearly quarter of an hour to dispose of its prey - at first the bat was very much alive, squeaking loudly and furiously flapping its wings. Even when the bat was dead it proved so large a morsel that it was only with the greatest difficulty that it was eventually swallowed *whole* ! The bird squatting on the ground, presented a grotesque spectacle with the large bat (at first very much alive, when moribund, hanging out of its mouth) and endeavouring to gulp down its meal. The bird flew up into a tree and then came to earth again before, at long last, it could deal successfully with its outsize meal. Lack of having a cine camera handy missed an unique opportunity of recording faithfully a remarkable episode, as the bird was so engrossed it could be approached to within a few paces.

Capt. Charles Pitman,
Leicester Court Hotel,
41 Queen's Gate Gardens,
London SW7 5NB.

- - - - - - - - - - - - - - -

RINGING NEWS

There has been very little response to my suggestion that the long tables of birds ringed in the ringing report should, in future, list only Palaearctic species. The letter published last month (*EANHS Bull.* 1974:43-44) completely misses the point: in the original note (*EANHS Bull.* 1974:11) part of my suggestion was that should an Ethiopian species be recovered, the number ringed of that species would indeed be given, in addition to the recovery details. There was no implication that *recoveries* of Ethiopian species would be withheld. The cost of publishing the Ethiopian species' totals in full is about £100. I should also mention that there is no virtue in publishing the report very soon after the end of the ringing year as very few recoveries would have been notified by then, indeed the delay in preparing the 1972/73 report is due simply to the fact that I have been waiting (and am still waiting) for news from Moscow of recoveries.

I propose to go ahead now with the preparation of the 1972/3 report; Table I will contain only Palaearctic species, the totals for Ethiopian species will be combined at the end of the table and will be given individually for Ethiopian species featured in Table 2.

Graeme Backhurst,
Box 29003,
Kabete, Kenya.

- - - - - - - - - - - - - - -

REVIEW

THE SOCIAL LIFE OF THE LION A study of the behaviour of wild lions *Panthera leo massaica* (Newman) in the Nairobi National Park, Kenya. by Judith A. Rudnai, Medical & Technical Publishing Co. Ltd., St Leonards House, Lancaster, England. pp.106 of text, with VII Appendices, pp.28 containing 93 black & white photographs, with 40 tables and 22 figures.

Although Mrs Rudnai's book cannot be considered the definitive work on the lion, based as it is on a comparatively small population, many of them inter-related, and living within the relatively small ecosystem of the Nairobi National Park, it nevertheless provides an illuminating insight into the life and habits of the species.

An objective system of identification, depending on the relationship between two rows of spots on the lion's muzzle, (described in detail in Appendix 3) enabled her to recognise every lion in the Park, using sketches and black and white photographs of their profiles made in the field; and thus to record the behaviour of all individuals.

Amongst other aspects of her subject she deals in detail with population structure and ranges (the percentage of juveniles in Nairobi Park is more than twice that in Lake Manyara Park); contagious activities such as greeting and grooming and their functions in the life of the pride; sexual behaviour; submission and dominance; predation patterns and methods of killing.

This is a scientific and scholarly work, fully and minutely illustrated with tables and figures and a large number of black and white photographs, but it is also a rare achievemnt in that it is a book which will also be of interest to the layman. The amateur naturalist visiting Nairobi Park may now endeavour to identify individual lions himself (without leaving the roads of course!), and to understand their individual and social behaviour. This book is a must for the reading list of Museum guides, of tour operators or indeed, for any of us who regularly take visitors to the Park.
In addition, parts of the introduction and appendices provide ready information on other aspects of Nairobi Park such as its history and vegetation.

As Mrs Rudnai emphasises, increasing pressures of population and numbers of tourists make it essential that our National Parks are managed on the basis of a sound knowledge of theri ecology and the behaviour of the animals which inhabit them. Failure to do so will inevitably change their character and possibly reduce their attraction. Should access of Nairobi Park animals to the Kitengela area south of the Park ever be restricted, by fencing or closer settlement, the Park's lion population would be affected in various ways. One result could be a reduction in the high percentage of cubs, so that the overall allure of the Park to tourists would be considerably reduced. Mrs Rudnai now has some funds to enable her to extend her lion study to the Kitengela, and one sincerely hopes that she will shortly find someone to donate a suitable vehicle, so that she may continue her valuable and painstaking work .

One unfortunate error noted in the book is the inclusion in Appendix 2 of cheetah, hyaena and jackal under the classification of Herbivores.

J.G.K.

EDITORIAL NOTE

Once again I have heard complaints that the *Bulletin* contains too many articles on birds. Frankly, these complaints amaze me. The majority of the material submitted is published. The material is submitted by members; therefore, if bird articles predominate, this can only reflect the interests of the members who take the trouble to write articles. Surely these facts are easy to grasp?

Ed.

LETTERS TO THE EDITOR

Sir,

A NEW GULL FOR KENYA - *LARUS ICHTHYAETUS* ?

Under the above title in this *Bulletin* (1973:138-139) D.A. Turner reported his sighting of two large gulls at Lake Nakuru on 14th July 1973, which he felt reasonably confident were Great Black-headed Gulls *Larus ichthyaetus*. The rather brief description given suggests that they were perhaps more likely Herring Gulls *L. argentatus*.

My only experience of the Great Black-headed Gull is the bird at Malindi reported above (pp.51-52) and a number of sightings in India early last year. Two of its most diagnostic features are the bull-necked appearance and the tricoloured bill. Yet in Turner's birds "the most striking feature . . . . was their rather long slender necks . . . . and their large heavy yellowish bills".

There is as yet no published record of the Herring Gull from Kenya. In a paper in press for *Ostrich*, Britton & L.H. Brown give a single Kenya record, and I have a number of recent sightings from several localities on the Kenya coast which will be properly documented at a later date. Most of the adult Herring Gulls seen on the Kenya coast in recent months have had a substantial amount of grey and sooty streaking on the crown and nape, whereas west European adults have a pure white head. Turner's birds had a "mottled grey-brown head" and may well have been north European Herring Gulls.

Peter, L. Britton,
Box 90163,

Sir,

Recently, on 28th February 1974, at Marsabit, on Lake Paradise we saw a Fish Eagle *Haliaaetus vocifer* attacking a large concentration of coots - Red-knobbed Coots *Fulica cristata*.

Our attention was first drawn to this by the frantic activity of the coots as they churned the water, hurrying to join together in a single raft of thousands of densely packed birds. We then saw the Fish Eagle flying around overhead and every time it passed over the raft the coots almost disappeared in the spray they caused. The Fish Eagle stooped on an outsider, almost disappeared under water and then remained semi-submerged for at least half a minute. It then tried to lift the coot off the water but failed and after struggling for about ten seconds, flew away without the coot. It circled overhead and then came down again on to the dead coot and again remained submerged for what seemed to be a very long time of up to half a minute. It failed again to lift the coot and flew off to rest on a tree on the crater rim. A series of long distance photos were taken of this hunt, but I doubt that they will be able to show much.

The second unusual sighting took place on Kisima Farm on the northern slopes of Mt. Kenya at 2600 m on 4th March 1974. A Secretary bird *Sagittarius serpentarius* was seen standing on a fresh killed and partly eaten hare

Lepus capensis. Two metres away was an angry Tawny Eagle *Aquila rapax*. Which one had killed the hare? Which bird was trying to steal it?

Recently at Kisima I saw a single Lammergeyer *Gypaetus barbatus* for the first time in my ten years in this area. A pair of Bateleur Eagles has also moved in to occasionally patrol our sky.

One conclusion one may be permitted to come to is that the unusually long dry period has caused some changes in the habits of these birds.

A. Dyer,
Kisima,
Private Bag,
Nanyuki,

Sir,

In November 1973 T.O. Osborne and I established a Zambian record of 211 species of bird seen or heard in one day. We were beset by bad weather, and with better planning too have little doubt that we will push this record to more than 250 species during 1974. We would therefore be interested to know from readers what the East African and World records are for this highly enjoyable sport.

R.J. Dowsett,
Box 498,
Livingstone, Zambia.

Sir,

Members may find the following notes on the Red-banded Frog *Phrynomerus bifasciatus* interesting. The species is not uncommon here it being normally a damp area, although we do not often see them on account of their being fossorial and nocturnal. I dug one up, for example, when investigating a termite mound with students. On another occasion I found one inside a rotting branch on which I was growing epiphytic orchids. My present interest is in a small one that has decided to spend the dry season in my bathroom.

Its first appearance was, so far as I remember, in November last year, when I found it one evening sitting in the middle of the mirror over the hand basin. I saw it about several times in a crevice at the end of the hand basin but did not realise what it was doing. Then in January I was away for a weekend. When I came back and started using the hand basin again the frog came up through the grating of the waste pipe. I found it sitting or hanging there with its elbows resting on the grating. It gradually oozed its way up and finally walked up the steep side of the basin. It found it a bit slippery but by going slowly and carefully it got out of the basin, walked across the ledge at the back, down the wall to the bath and finally disappeared under the ledge of the bath..

Since then, I have seen it most evenings. Its plan is to come out and absorb water from my face cloth, which I have the habit of leaving on the corner of the bath. After the room has been dark for some time it comes out and presses itself onto the cloth. It seems to absorb the water through its skin, especially of the belly and I have not seen any sign of it sucking or drinking any water. If disturbed it moves off slowly and carefully, and folds itself up in the crack at the end of the bath. Sometimes it goes right away to hide. To do this it goes carefully onto the wall, then moves backwards down the wall about 15 cm on to the top of the little door for inspecting the plumbing, which does not quite shut. It then inserts itself under the rim of the bath. It looks like a climber searching for and moving with great care from one foothold and handhold to another.

When we get rain I shall have to put it out, if it does not find a way out for itself. I do not know how it got in, it may have come up a waste pipe, especially as there is no trap in the bath pipe. If so, it may take that way out.

Having realised what it does, naturally I see that the cloth is wet each evening. I do not know whether it is eating anything. It may be getting young cockroaches and a variety of small things that manage to get through the mosquito screening. In this rural area and with our hot climate we can never finally get rid of cockroaches and ants.

Red-banded Frog: black or near black all over with bold red bands running from the snout, past the eyes to near the groin. Also a large red patch on the rump and quite a lot of red spots and bands on the legs.
I have not seen the abdomen, but it is usually black with pale or white markings. Length of present specimen about 3 to 3.5 cm when folded up for sitting with its legs tucked in.

Mary E. Archbold,
Box 171, Korogwe,
Tanzania.

- - - - - - - - - - - - - - -

REQUEST

Mrs Jean Brown of the National Museum is very anxious to contact anyone having old photographs of Kenya peoples wearing traditional dress and also showing any aspects of the traditional way of life (e.g. grinding grain, digging fields, building houses, herding cattle etc.). Photographs can be copied (for research purposes) and returned to the owner. Please write to: Mrs Jean Brown at the National Museum, Box 40658, Nairobi or phone her on Nairobi 43090.

- - - - - - - - - - - - - - -

FUNCTIONS

Monday 8th April 1974 at 5.15 p.m. in the National Museum Hall, Members slide show. Please bring 35 mm transparencies of natural history subjects to the projectionist before 5p.m. for arranging.

Saturday, 4th May 1974: Mrs Fleur Ng'weno will lead a morning walk for birds and flowers in the Nairobi area. Please meet at the Museum at 8.30 a.m.

Saturday/Sunday 11th/12th May: Mountain Lodge. This popular Lodge has been booked for the Society again at shs.90/- per. person for tea, dinner and breakfast, and of course game viewing. No children under 12. Members wishing to take part in this excursion should please write to the Secretary, Box 44486 enclosing your cheque made out to AFRICAN TOURS AND HOTELS LTD., before May 1. Members should make their own way to the lodge, which is on the slopes of Mt. Kenya and arrive about tea time. To reach the lodge, follow the main road through Thika, Fort Hall (Muranga), Sagana and Kiganjo. The way to the lodge is signposted from Karatina (there is also an alternative road signposted from Karatina but is not recommended if wet).

Wedensday morning bird walks continue to meet in front of the Museum (Nairobi) at 8.45 a.m. every week. Please note that Labour day, 1st May will be an all day trip - please bring picnic lunch.

- - - - - - - - - - - - - - -

HELP WITH FUNCTIONS

Mrs Lise Campbell, who has so successfully organised the Society Functions for so long, will be away this year for several months. Would any members willing to lead a field trip or give a lecture *please* contact the Secretary. Suggestions for trips and meetings would also be most welcome. Thank you.

Editor.

- - - - - - - - - - - - - - -

ADVERTISEMENT

A GUIDE TO THE SNAKES OF UGANDA by C.R.S. Pitman. Revised edition. About 268pp., with 28 coloured plates, 18 plain plates and 2 maps, crown 4to, cloth bound. Sterling £10 (U.S. $25) post free.

The first edition of this book was published in Uganda in 1938 and consisted of only 450 copies. It has long been rare, and in recent years the few copies that have turned up have been selling for about £60.

The author has now completely revised the text and 5 new coloured plates have been added, so that the new edition of this standard work is completely up to date. As the only comprehensive work on the snakes of any part of Africa north of the Zambesi it has an importance far beyond the confines of Uganda.

A prospectus with a specimen coloured plate will be available shortly, and the book is scheduled for publication in May 1974.

Wheldon & Wesley Ltd., Lytton Lodge, Codicote, Hitchen, Herts, England.

- - - - - - - - - - - - - - -

WANTED

Mrs Jean Brown is urgently in need of copies of the following books if any member has a copy they do not use and wish to sell:

Margeret Trowell "The Tribal Crafts of Uganda"
P.H. Gulliver "A preliminary Survey of the Turkana". Cape Town. 1965. (reprint)

Please write to: Mrs J. Brown at the National Museum, Box 40658 or phone her on Nairobi 43090.

- - - - - - - - - - - - - - -

LIBRARY NOTICE

Readers may have noticed the lists of "Recent periodic literature available in the Library" which appear in the *Bulletin* from time to time. Some background information mey be useful. Each entry is abstracted from a journal and typed on a card; the cards are filed in classified order in a drawer in the catalogue cabinet. There is an index to the classification, so should you need some information on, say, Accalathura, you would look up this word in the index and find that its number is 595.372. Looking under this number in the card index you would see that I found an article on these creatures in the *Bulletin du Musée national d'Histoire naturelle (Paris)*, No 68, 1972.

The selection of periodicals may puzzle you. Why, you may ask, do I list articles from *Acta Zoologica et Pathologica Antverpiensia* and not from the *E.A. Wildlife Journal*? It is because I have deliberately not listed articles from specifically African periodicals. I thought workers would search these for themselves in any case, and have restricted myself to more general periodicals that I thought readers might miss. Besides, as most of the articles in these periodicals would concern East Africa, listing them would involve making what librarians call "analytics", i.e. a separate card for each article, and there simply is not time to do this.

Wishing to find out how much work would be needed either in making analytics or doing a search, I made a rough count of those periodicals in the Library either issued from or specifically dealing with Africa. It came to 70, spanning the whole alphabet from *African Wildlife* to the *Zambian Ornithological Society Bulletin*. Of these 70, 27 are not current, either because they have ceased publication or for some reason we no longer receive them.

If, therefore, you wish to find out about some subject and to make use of the full resources of the Library, you must proceed as follows:

1. Look the subject up in the card index; if there is a relevant card, jot down the reference and find it in the appropriate journal
2. If there is no card for the subject, look in the appropriate reprint box (or get me to).
3. If there are no reprints on the subject, you must select the most suitable periodical and go through it systematically, begining at the latest issue.

I wish you good hunting and will gladly help.

P.M. Allen,
Librarian,
Box 44486,
Nairobi.

- - - - - - - - - - - - - - -

NEW MEMBERS - APRIL 1974

Full Members:

Mrs T. Bennett, Box 30195, Nairobi.
Mr R. Briand, Box 43844, Nairobi.
Mr A. Dixon, Box 24886, Nairobi.
Miss Inge Dostrup, Box 44105, Nairobi.
Mrs G. Hoffman, Box 46687, Nairobi.
Dr R.L. Jachowski, Zoology Dept., University of Nairobi, Box 30197, Nairobi.
Mr Jørn Vestergaard Jensen, Holtevej 13, 8000 ARHUS C, Denmark.
Mr I.R. Lane, Box 43233, Nairobi.
Mr H. Lionnet, Box 396, Kiambu, K
Miss E. Oxtoby, Kenyatta University College, Box 43844, Nairobi.
Mr H. Reim, German Agriculture Team in Kenya, Box 47051, Nairobi.
Mr T.C. Teasdale, Box 81, Kijabe, Kenya.
Mr S. Uehara, Laboratory of Physical Anthropology, Kyoto University, Japan.

Junoir Members:

Peter Hobson, Box 30035, Nairobi.
Nicholas Pringle, Box 14134, Nairobi.

- - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN MAY 1974

CONTENTS

The occurrence of Waders in the Dar es Salaam area of Tanzania - - - - - 66

Hildegaard's Tomb Bat *Taphozous hildegaardeae* First record from Tanzania 70

Further records of Madagascar Pratincole *Glareola ocularis* Near Dar - - 71

Recent observations of migratory shore and water birds in Tsavo East National Park - 72

Parasites collected from a fledgling Double-toothed Barbet *Lybius Bidentatus* - - 74

Correction - Bats collected at Lake Rudolf - - - - - - - - - - - - - - - 75

Kenya Trees and Shrubs by Dale & Greenway - - - - - - - - - - - - - - - 75

Letter to the Editor - 76

Contributions to the Bulletin - 76

Functions - 76

New Members - 76

THE OCCURRENCE OF WADERS IN THE DAR ES SALAAM AREA OF TANZANIA - PART TWO

DROMAS ARDEOLA CRAB PLOVER

Common non-breeding visitor to sandy shores and estuaries. The first birds usually arrive in mid October (earliest date 12th October) and flocks of up to 300 are not uncommon by late November. Numbers decline rapidly in March and April although small parties can often be seen in May and even June. A few birds (usually immatures) over summer so that I have records for every month of the year. Strictly a bird of sandy shores and usually in monospecific flocks although at low tide flocks will scatter widely over sand flats. Tide roosts above high water mark on beaches.

BURHINUS VERMICULATUS WATER DIKKOP

Probably a breeding resident in very small numbers. It has been recorded in every month usually in small parties of up to 10 birds. Between March and May, parties of up to 15 have been recorded and at this time it is particularly noisy. No proof of breeding has been found but it is thought to breed on ridges and sandbanks in mangrove swamps. It favours open areas in mangroves and will feed well under the mangrove canopy as well as in area of open mud among mangrove stumps and on salt flats. It is strictly crepuscular and hence difficult to track down during the day although it will go out onto the embankments of salt pans among tide roosts of other waders.

HAEMATOPUS OSTRALEGUS OYSTER CATCHER

Probably a passage migrant in very small numbers and apparently restricted to rocky coral shores. There are two recent records: T. Gardiner (pers. comm.) saw a party on Honeymoon Island in May 1972 and Williams (*EANHS Bull.* 1972:192) saw two on the Ocean Road foreshore in September 1972. I have not recorded this species myself but the inshore islands where it may be more regular are rarely visited.

VANELLUS LUGUBRIS SENEGAL PLOVER

Regular non-breeding visitor to open areas in coastal bush. Always in monospecific flocks, this species occurs commonly from late May to August when flocks of up to 60 have been recorded. A favourite site is the short grass surrounds of the University sewage beds where birds collect during the day. It also occurs in grassy and burnt areas in acacia scrub, coastal bush and sisal plantations as well as occasionally visiting dry salt flats. This species feeds mostly at night and during June and July it can often be heard flying to feeding grounds, even over suburban Dar es Salaam. I have one October record of 10 birds and it is possible that the species occurs in other months in small numbers. However, the general impression is that it is a non-breeding visitor that arrives in the area after the long rains, having bred elsewhere.

VANELLUS MELANOPTERUS BLACK-WINGED PLOVER

Vagrant. One record of this highland species on short grass near salt flats, Kunduchi 24th January 1971.

PLUVIALIS DOMINICUS LESSER GOLDEN PLOVER

Vagrant. One record of two in a tide roost at salt pans April 1973. (*EANHS Bull.* 1973:84-85.).

PLUVIALIS SQUATAROLA GREY PLOVER

Common non-breeding visitor and passage migrant to tidal sand flats, salt pans, dry salt flats and lagoons. It tends to form small monospecific flocks or to mix with Whimbrels at tide roosts although when feeding it will scatter over sand flats with other plovers. Small numbers recorded from coral coasts and islands and also at sewage beds and in open mangroves. Main passage in September - October and March when flocks of over 200 have been recorded. Flocks of 80 - 100 are more usual from November to February and smaller flocks of up to 50 occur from April to August.

CHARADRIUS HIATICULA RINGED PLOVER

Common non-breeding visitor and passage migrant mainly to tidal sand flats and salt pans but also recorded from dry salt flats, coral coasts, sewage beds, mangroves, fresh water pools, wet rice paddies and even open grass in acacia bush after rain. Mixes freely with other plovers particularly at tide roosts but tends to be aggressive over feeding territory. The main arrival is in mid September and from then on until late October flocks of up to 200 are not uncommon. From October to March flocks of up to 100 are more usual. There is little evidence of return passage and by early May flocks of more than 20 are unusual. During the period May to August small parties are frequently recorded and first evidence of return passage precedes the main arrival by up to eight weeks. Most birds appear to be referable to the Siberian race *tundrae*.

CHARADRIUS DUBIUS LITTLE RINGED PLOVER

Regular non-breeding visitor and/or passage migrant in very small numbers mainly to rain water pools on dry salt flats bordering mangroves but also recorded from salt pans and mangrove creeks. It usually consorts with other small plovers. Recorded between 2nd November and 25th January as follows: December 1970 (up to 5), January 1971 (up to 3), November 1971 (up to 3), November 1972 (up to 5), January 1973 (1). Birds were only once recorded on more than two consecutive visits which implies that the species passes through the area but does not over-winter.

CHARADRIUS PECUARIUS KITTLITZ'S SAND PLOVER

Non-breeding visitor in variable numbers and of irregular occurrence mainly to dry salt flats but also recorded from salt pans. Usually in mixed flocks with other species although this species is more closely associated with dry salt flats than other small plovers. It has been recorded in every month although most regular from November to January and from June to August. Parties of more than 15 are rare. In November 1970 recently fledged juveniles were seen with one pair of adults and it is possible that a few pairs occasionally breed on the dry salt flats.

CHARADRIUS TRICOLLARIS THREE-BANDED PLOVER

Breeding resident in small numbers and probably also a non-breeding visitor. Frequents muddy edges of both fresh and salt water pools, sewage beds, creeks, salt pans, salt flats and mangroves. Never recorded on the open shore but comes within sight of it when feeding along mangrove creeks. The species rarely flocks and rarely mixes with other waders. Breeding has been recorded from May to July (at end of long rains) when clutches of up to 4 eggs (average of 4 = 2.25) have been found in nest scrapes generously lined with mud fragments and small coral pebbles. The eggs are apparently never buried. This species probably breeds in several localities but it favours especially salt pans near mangroves. At Msasani up to six pairs breed in fairly close proximity to White-fronted Sand Plovers but there is no competition for nest sites. Whereas the latter species prefers to nest well above the water level on the sandy embankments, the Three-banded Plover invariably nests within a metre or so of the water's edge along the edge of the embankment or on dried mud. Although both species are intraspecifically aggressive during the breeding season they do not appear to show any aggression towards each other. In June 1973 I found a very small White-fronted Sand Plover chick being brooded (but not in the nest scrape) by an adult within 1.5 m of an incubating Three-banded Plover. In spite of breeding concentrations such as occur at Msasani, party sizes rarely exceed 6 - 8 birds. However, in October larger parties (up to 15) have been recorded and may represent either the flocking of locally bred birds or an influx of non-breeding visitors. This species is decidedly crepuscular and feed throughout the night. It is one of the few waders that will feed under the mangrove canopy.

CHARADRIUS MARGINATUS WHITE-FRONTED SAND PLOVER

Breeding resident in small numbers and common non-breeding visitor and passage migrant to tidal sand flats, sandy beaches and salt pans. It has also been recorded from dry salt flats and a party was once seen feeding in open grass in acacia bush after heavy rain. Tends to form monospecific parties on the edge of flocks of other plovers, even in tide roosts. Bird have been recorded in every month, and at favoured sandy beaches parties of up to 30 can be seen at any time of the year. However, there is evidence of passage in April and May when flocks of up to 70 have been recorded. Most birds at this time are in nuptial dress and display; territorial behaviour and copulation are often seen. During May - June a few pairs breed on the sand embankments of salt pans. The deep nest scrapes which are lined with mud fragments and small shells are usually in the embankments about a metre above the water level in the pans. The eggs are often half buried in the nest lining. Newly hatched young have been found in early June (1972) and early July (1973). Of the thirty plus pairs that may be seen at Msasani in May only a maximum of six pairs attempt breeding. It is possible that other pairs breed on the quieter sand beaches, but I think it likely that most of the May birds are on their way to more northerly breeding grounds. By July flocks of 20 - 30 are more usual and the species becomes quite scarce from September to January.

CHARADRIUS MONGOLUS MONGOLIAN SAND PLOVER

Common non-breeding visitor and passage migrant in variable numbers to tidal sand flats, salt pans, dry sand flats and lagoons. This species mixes freely with Greater Sand Plovers and Ringed Plovers although it tends to form closer flocks than either of these species and is less aggressive in defence of its feeding territory. The main arrival is in mid September and flocks of up to 200 are not uncommon until late October. During the last three seasons, numbers on passage have been very variable however, and a maximum flock of over 400 was recorded in late October 1972. Between October and March flocks rarely exceed 100 and numbers decline rapidly during March with little evidence of a return passage. Small numbers have been recorded between April and August including the first evidence of return passage which precedes the main arrival by up to six weeks. This species is much more common on autumn passage than in winter and the variable numbers from year to year may reflect difficult breeding conditions.

CHARADRIUS LESCHENAULTII GREATER SAND PLOVER

Very common non-breeding visitor and passage migrant to tidal sand flats, salt pans, dry salt flats and lagoons. This species mixes with other plovers but is inclined to be aggressive both towards them and intraspecifically, at tide roosts and on feeding grounds. When feeding on sand flats they scatter widely in the manner of Grey Plovers. There appears to be two peaks in the main autumn passage. The first flocks of up to 200 move through in late July and early August after which there is some decline until mid September. From then until late November flocks of up to 500 have been recorded and flocks of 250 - 300 are common; these latter numbers are maintained through to March when there is a peak extending into April when flocks of 300 - 400 may again be seen. During the period April to July small numbers are usually recorded. It is possible that the early passage is of birds which have bred on mainland Africa and the Arabian coast and that the later passage is of more northerly breeding birds.

CHARADRIUS ASIATICUS CASPIAN PLOVER

Regular passage migrant in very small numbers to dry salt flats where it will mix with other plovers. Small parties of up to five recorded between late August and mid October with one record of a single bird in December 1971 (*EANHS Bull.* 1972:175). This species is a common winter visitor to short grass plains inland in Tanzania.

W.G. Harvey,
British Council,
Djalan Imam Bondjd,
57 - 59 Djakarta,
Indonesia.

(To be concluded)

HILDEGARDE'S TOMB BAT *TAPHOZOUS HILDEGARDEAE* THOMAS, 1909
FIRST RECORD FROM TANZANIA

Studies on the bat collection of the National Museum, Nairobi revealed a Tanzanian specimen of the brown-bearded Hildegarde's Tomb Bat. It was collected by J.W.S. (i.e. Jim W. Simons of the Cave Exploration group E.Africa) on 19th February 1966 from a cave on the Ikanga Sisal Estate near Tanga; the male specimen is catalogued NMN 7932.

This bat is hitherto unrecorded from Tanzania (cf. Hayman & Hill 1971), but its occurrence was to be expected. Its only known distribution was along the Kenya coast and the additional Tanzania record is the southernmost for the time being. This peculiar distributional pattern is absolutely unique amongst African bats. A comparable example amongst mammals is the coastal distribution of the Yellow-rumped Elephant Shrew *Rhynchocyon chrysopygus* Gunther 1881.

T. hildegardeae was described by Thomas (1909) as a new species from Rabai, inland from Mombasa, including other specimens from Shimoni. It was again recorded from the latter locality 9.11.1911 by Falcoz (1923) as host of the bat-parasitising fly*Brachytarsina alluaudi* and also by Harrison (1961). From the same place there is a male specimen in the National Museum Nairobi, (NMN 7931, also collected by J.W.S. on 13.2.1966) and I took two small series from the coral caves there on 19.9.1970 and 16.5.1971.

Other recorded localities are few. *T. hildegardeae* was found on 12.2.1911 in Kolidini near Mombasa (? or Kilindini) as possible host of the cimicid bug *Loxaspis miranda* Rothschild 1912 (see Usinger 1966). Kulzer (1956) collected it in Ngombeni south of Mombasa on 17.7.1956; this locality was wrongly credited to Allen & Lawrence (1937) by Harrison (1961).

Unpublished locality records, based on specimens in the National Museum Nairobi, are: Ukunda (NMN 6705, 5.10.1962), Tiwi (NMN 6807-8, 7600-1; 16-17.4.1957) and Ngomeni. From the latter place I identified two male specimens collected in September 1959 (no collector or catalogue number available). Unfortunately I cannot decide whether the locality is (Ras) Ngomeni north of Malindi or the settlement of the same name inland from Tanga.

Harrison (1961) is the only author who records this bat species in the hinterland of the Kenya coast: he examined specimens from Masabuku (Masabubu) on the Tana River and from Chanler's Falls on the northern Guaso Njiro. However it would be desirable to have the specimens on which these records are based re-examined, especially as the latter place is the type locality of a subspecies of the quite closely related *T. perforatus* Geoffroy 1818, described by Thomas (1915) as *headinus*.

Along the coast the above records prove the presence of *T. hildegardeae* for all seasons of the year; the longest period for which no records are available is from November to approximately mid February. This indicates that considerable migratory movements of the coastal bat populations are not to be expected. However, as no *Wochenstubens**or kindergartens have yet been found, local migrations might be possible.

---

* = Maternity room.

By these few facts and comments on our local knowledge of an African bat, I hope to stimulate interest in local small mammal faunas. Considering the wide scope of the literature cited, including bat bug and bat fly studies, and regarding the scanty biological observations available it should be alerting and tempting for everybody interested in biology to study more intensively the small mammal fauna of Kenya in a wider scope of its aspects than usual.

Dieter Kock,
Forschungsinstitut Senckenberg,
D 6000 - Frankfurt am Main,
Senckenberg-Anlage 25, Germany.

REFERENCES:

Allen, G.M. & Lawrence, B. 1937. Scientific results of an expedition to rain forest regions in Eastern Africa. III. Mammals. *Bull. Mus. comp. Zool. Harv. Coll.* 79:29-126.

Falcoz, L. 1923. Biospéologica. XLIX. Pupipara (Diptères) (première Série). *Arch. Zool. expér. gén.* 61:521-552.

Harrison, D.L. 1961. A checklist of the bats (Chiroptera) of Kenya Colony. *Jl E. Africa nat. Hist. Soc.* 23 (7) (104):286-295.

Hayman, R.W. & Hill, J.E. 1971. In: Meester, J. & Setzer, H.W. (Eds.). The mammals of Africa, an identification manual. Part 2: Order Chiroptera: 1-73. Washington.

Kulzer, E. 1959. Fledermäuse aus Ostafrika. *Zool. Jb. Syst.* 87:13-42.

Rothschild, N.C. 1912. On a new genus and species of Clinocoridae (Cimicidae) from Uganda. *Bull. ent. Res.* 2:363-364.

Thomas, O. 1909. New African small mammals in the British Museum. *Ann. Mag. nat. Hist.* (8) 4:98-99.

- - - - - 1915. Results from mammal survey. Notes on *Taphozous Saccolaimus*. *J. Bombay nat. Hist. Soc.* 24:57-63.

Usinger, R.L. 1966. Monograph of Cimicidae (Hemiptera - Heteroptera). The Thomas Say Foundation, Vol. 7.

- - - - - - - - - - - - - -

FURTHER RECORDS OF MADAGASCAR PRATINCOLES *GLAREOLA OCULARIS* NEAR DAR ES SALAAM

Shortly after the publication of my note in the August 1973 issue of the *Bulletin* I had my first 'autumn' sightings of Madagascar Pratincoles near Dar es Salaam.

The first two birds were seen on 20 August 1973 followed by a party of six on 28th August and a single bird on 11th September. All the birds were seen resting with large flocks of Palaeartic waders on the muddy shores of a saline lagoon at Msasani. In spite of almost daily visits to the Msasani area during these months, these were the only sightings. The birds behaved very much the same as those seen in April, arriving late in the afternoon and spending a good deal of time circling high in the air. All of these later birds appeared to be adults in good plumage (i.e. bright yellow bases to the bills and rich chestnut underparts) and to be rather less nervous than the April birds.

I would suggest that these birds were on return passage to Madagascar.

W.G. Harvey,
British Council,
Djalan Imam Bondjd,
57 - 59 Djakarta,
Indonesia.

REFERENCE:

Harvey, W.G. The Madagascar Pratincole *Glareola ocularis* in Tanzania. *EANHS Bull.* 1973:115.

- - - - - - - - - - - - - - -

RECENT OBSERVATIONS OF MIGRATORY SHORE AND WATER BIRDS IN TSAVO EAST NATIONAL PARK

Nobody going to Tsavo East would normally expect to see many ducks and waders, but the past migration season has brought a number of interesting and, we believe, unusual records for this area, both in terms of species seen and of numbers. Our own records for comparison go back to late 1968; in addition A.D. Forbes-Watson compiled a preliminary checklist for the park in 1967. Further information was kindly supplied by C. Smeenk for the period July 1970 to January 1973.

ANAS ACUTA PINTAIL

Has been observed in several of the past years but only in small numbers (maximum 12 on 30.12.72 on Aruba Dam). Between late December 1973 and mid March 1974 regularly well over a dozen at Aruba, with maximum counts of 25 on 12.1.74 and 1.3.74.

ANAS CLYPEATA SHOVELER

On 24.12.73 about 15, all in eclipse plumage but one or two recognisable males, were seen on Kandetcha Dam (defunct), 3 km west of Aruba. Some water had collected there to form a shallow pond with grassy bottom. Eight were seen there again on 31.12.73, and several were found in scattered locations throughout January and February 1974. The last observation to date involved six birds at Aruba on 1.3.74. While the species is a fairly common winter visitor and/or passage migrant elsewhere in East Africa, we know of no previous record from Tsavo East.

ANAS CRECCA TEAL

One female was seen on 22.1.74 on a small rainwater pool about 12 km ENE of Park HQ. She tended to keep with three Wigeon (see below), rather than with Garganey (see below), that were present on the same pool. We know of only one previous record for Tsavo East: C. Smeenk (pers. comm.) saw a male three times between 7th and 24th January 1971 at Ndara Borehole. The species is said to be "a scarce but perhaps regular migrant to Kenya" (Backhurst, Britton & Mann, 1973).

ANAS PENELOPE WIGEON

Previous records, only once or twice a year, always involved single birds only (Leuthold 1973). This past season we saw Wigeons at least five times between 31.12.73 and 30.1.74; two observations concerned a pair, and one male and two females (22.1.74).

ANAS QUERQUEDULA GARGANEY

We have recorded this species every year, but never before in the numbers seen this season: on 24.12.73 at least 25 at Aruba and 15 on Kandetcha Dam (with the Shovelers mentioned above); on 31.12.73 at least 50 at Aruba and 10 at Kandetcha; at least 40 at Aruba on 1.3.74, with smaller numbers seen in between and up to 19.3.74.

ANAS STREPERA GADWALL

On 24.12.73 one female on Kandetcha Dam, together with about 15 Shovelers and 15 Garganey (see above), but keeping to itself. Seen both sitting and in flight. No previous records from Tsavo; the species seems to be very scarce in East Africa (Backhurst *et al.* 1973).

TRINGA ERYTHROPUS SPOTTED REDSHANK

While we have observed this species fairly regularly in recent years (e.g. Leuthold 1973), numbers in the past season greatly exceeded earlier records. Maximum numbers were 10 at Kandetcha Dam on 31.12.73 and 16 at Ndara Borehole on 9.2.74 Backhurst *et al.* (1973) give the maximum number seen together previously as ten.

CIRCUS AERUGINOSUS AERUGINOSUS (EUROPEAN) MARSH HARRIER

Records of this species were rather spotty in previous years, with quite a few for the 1969/70 season, none for the following two years and only one in January 1973. This year we were struck by the frequency with which we saw this species; there were at least nine observations of 1 - 3 individuals, in different places, between 24.12.73 and 16.2.74. According to C. Smeenk (pers. comm. and forthcoming paper) the number of Palaearctic raptors varies considerably from year to year; this may be even more pronounced in a species with rather specialized habitat requirements.

The above observations were unusual, in our experience, by either involving species not previously recorded in Tsavo East or numbers far exceeding those of earlier years. Admittedly, we have not used strictly quantitive methods to confirm the latter aspect, but even relatively casual notes can give a reasonable picture of what is happening. As a preliminary explanation for the apparent "influx" of shore and water birds to Tsavo East we suggest the unusual rainfall pattern of the last six months. While much of Kenya has had considerably sub-normal rainfall, most areas in Tsavo Park received about average amounts in November/December 1973. This may have induced some birds to abandon traditional wintering areas and search for suitable habitats elsewhere, which they may have found in Tsavo East, at least for part of the season.

We would be interested to hear whether other people have made relevant observations in their usual "hunting grounds", to either confirm or disprove this hypothesis.

Walter and Barbara Leuthold,
Tsavo Research Project,
Box 14, Voi, Kenya.

REFERENCES:

Backhurst, G.C. 1973. Scarce palaearctic migrants in Kenya. *EANHS Bull.* 1973:113-114.

Backhurst, G.C., Britton, P.L. & Mann C.F. 1973. The less common palaearctic migrant birds of Kenya and Tanzania. *Jl E. Africa nat. Hist. Soc. & Nat. Mus.* 140.

Leuthold, W. 1973. Less common palaearctic migrants. *EANHS Bull.* 1973:111-112.

- - - - - - - - - - - - - - -

PARASITES COLLECTED FROM A FLEDGLING DOUBLE - TOOTHED BARBET

LYBIUS BIDENTATUS

A fledgling Double-toothed Barbet *Lybius bidentatus* was found lying on the ground beneath its nest, about 7 m above in a hole in a tree. On examination it was found to have severe internal haemorrhage and some brain damage. It was humanely destroyed and a post-mortem examination was carried out, during which numerous parasites were found and collected. These are listed below:

ACARINA. Two species of feather mites were identified, both belonging to the family Pteronyssidae.

Hyonyssus eurythrix (Gaud & Mouchet, 1959). 27 (10 m.; 17 f.) individuals were collected.

Pteronyssus conurus (Trouessart, 1886). 103 (48 m.; 55 f.) individuals were collected.

MALLOPHAGA. Two genera of chewing lice were identified.

Penenirmus sp. (superfamily Ischnocera). 4 specimens were collected.

Myrsidea sp. (superfamily Amblycera). 2 specimens were collected. This genus is rarely collected on barbets (R. Dalgleish, pers. comm.).

CESTODA. A single immature tapeworm, provisionally placed in the genus *Raillietina*, was found in the small intestine. Because of the immaturity of the specimen, and hence the lack of any mature proglottids, classification was difficult and some reservations about its placement in *Raillietina* must be held, especially as this genus is known to be of cosmopoliton distribution, chiefly characteristic of the Galliformes and Columbiformes (Rothschild & Clay 1952. *Fleas, flukes and cuckoos*:Collins. p.197).

We should like to thank Professor W.T. Atyeo who identified soecimens of Acarina, Dr R. Dalgleish who identified specimens of Mallophaga and Dr P.K. Bitakaramire who identified the single specimen of the Cestoda.

M.D. Purton,
Dept. of Veterinary Anatomy,*
University of Nairobi,
Box 30197,
Nairobi, Kenya.

M.K. Kigaye,
Faculty of Veterinary Science,
Makerere University,
Box 7062, Kampala,
Uganda.

*Present address.

BATS COLLECTED AT LAKE RUDOLF - CORRECTION

The second sentence in the second paragraph should read - "All but the two Megadermatids . . . etc."

The last sentence of the first paragraph was omitted, this should read - "Common names are taken from Harrison (1960) and Rosevear (1965)."

KENYA TREES AND SHRUBS BY DALE AND GREENWAY (1961)

This work has recently fetched high prices second hand (Shs. 300/- and Shs. 400/- signed by one of the authors). People evidently think that it is out of print. I was told on 26th March 1974, by the proprietor of Prestige Bookshop, Mama Ngina Way, that he has nearly fifty copies left selling at Shs. 135/-. He prudently bought up the entire remaining stock from the publisher some months ago. Members of the E.A.N.H.S. wishing to acquire this valuable work should therefore hasten to do so, while those with second hand copies to sell should wait a little to ensure a good price.

J.B. Gillett,
Box 45166,
Nairobi.

LETTER TO THE EDITOR

Sir,

On monday 1st April 1974, I found lying dead in a gutter in Wabera Street, Nairobi what I think was a Black and White Cuckoo *Clamator jacobinus*. It had black upperparts, a short crest and a roundish white patch (rather than a short bar) on each wing. Most of the long tail feathers were missing, but the two that were left, one on each edge, were black with white tips.

I wondered if the bird could have flown into a tall building or got knocked down in a rainstorm while flying over the city.

Patricia Plumtre,
Box 40111, Nairobi.

- - - - - - - - - - - - - - -

CONTRIBUTIONS TO THE *BULLETIN*

Mr T.D. Morris write: "There is a dearth of articles on insects, fish and mammals in the *Bulletin*. Members are earnestly requested to send notes or articles to the Editor. Notes on Camp sites and out of the way places which might be of interest to members are also very welcome."

- - - - - - - - - - - - - - -

FUNCTIONS

Saturday, 4th May 1974: Mrs Fleur Ng'weno will lead a morning walk for birds and flowers in the Nairobi area. Please meet at the Museum at 8.30 a.m.

Saturday/Sunday 11/12 May, 1974: Mountain Lodge excursion. Full details were published in the April issue of the *Bulletin*.

Monday, 13th May 1974 at 5.15 p.m.: In the National Museum Hall, Nairobi. Mr Mike Clifton will give an illustrated talk on "Some curious *dudus* I have known".

Wednesday morning bird walks continue to meet in front of the Museum (Nairobi) at 8.45 a.m. every week. Please note that 1st May, Labour Day is a public holiday and will be an all day trip. Please bring your picnic lunch.

- - - - - - - - - - - - - - -

NEW MEMBERS - MAY 1974

Life Member:

Mr P. le Pelley, Box 30333, Nairobi.

Full Members:

Mr B.K. Abramson, Box 82988, Mombasa, Kenya.
Mr B.T. Fitton, Box 30214, Nairobi.
Dr Ing. Mario Giacolini, Studio Tecnico, Via Damiane Chiesa 46, 58100, Grosseto, Italy.
Mrs J.M. Gray, Box 959, Nakuru, Kenya.
Mrs Audrey Read, Box 41221, Nairobi.
Mrs M.J. Malvestuto, Box 30518, Nairobi.
Mrs S. Vamos, Box 45568, Nairobi.

- - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN JUNE 1974

CONTENTS

Collared Flycatcher in Western Kenya - - - 78

Some bird notes from the Mara - - - 78

Kisumu Heronry - - - 79

Waders in the Dar es Salaam area of Tanzania - Part Three - - - 80

Easter at Lake Baringo - - - 82

Ringing Notice - - - 84

Bulletin Index for 1973 - - - 84

Request for information - - - 84

White-cheeked Terns near Dar es Salaam, Tanzania - - - 85

Sunbird research - - - 86

Flora of Upland Kenya (notice) - - - 86

Obituary - - - 87

Society Functions - - - 88

New Members - - - 88

A RECORD OF A COLLARED FLYCATCHER *FICEDULA ALBICOLLIS SEMITORQUATA* IN WESTERN KENYA

Britton & Britton (1973) *EANHS Bull.* 1973: 94-95 record this species for the first time in Kenya, with a female, unraced, collected at Ng'iya on 2nd October 1972.

On 3rd March 1974 near the Mara River, below the Siria Escarpment, and just outside the boundary of the Mara Masai Game Reserve, Duncan Cape and I managed to get brief but excellent views of a male *Ficedula* flycatcher at ranges down to 10 m. Brief notes and a drawing were made at the time. Aided by Graeme Backhurst I later compared these with descriptions and illustrations in Makatsch's *Wir bestimmen die Vögel Europas*, 2nd Edition, 1969. I decided that the bird was a Collared Flycatcher of the race *semitorquata*.

Description: underparts entirely white; crown, sides of face, neck, wings, rump and tail black; large white patch on forehead; white in outer tail and large white area on wing apparently formed from edges of secondaries, coverts and bases of primaries; white patch on side of neck continuous with white of underparts but not forming a collar on hind neck.

The Pied Flycatcher *F. hypoleuca* has a much smaller area of white on the forehead, and lacks the white patches on the sides of the neck. The nominate race of the Collared Flycatcher has a complete white collar and white rump. Thus these two forms are eliminated.

Thus the present sighting is the second record of *Ficedula albicollis* and the first of *F. a. semitorquata* in Kenya.

Clive F. Mann,
Box 337 Kapsabet.

- - - - - - - - - - - - - -

SOME BIRD NOTES FROM THE MARA

On 2nd and 3rd March 1974 Duncan Cape and I spent some hours bird watching along and near the Mara River below the Siria (= Ololol) Escarpment, and along the road from Mara Bridge to Lolgorien, both inside and outside the Mara Masai Game Reserve, Kenya. Apart from the Collared Flycatcher in the above note, the following interesting species were also recorded.

CICONIA ABDIMII ABDIM'S STORK Hundreds seen on the flooded grassy plains.

CICONIA EPISCOPUS WOOLLY-NECKED STORK 7+ with the abundant herons and other storks on flooded plains. Williams (1967) *A Field Guide to the National Parks of East Africa* records it as'rare'.

HIRUNDO SEMIRUFA RUFOUS-CHESTED SWALLOW A number seen with other swallows. Not recorded by Williams.

CISTICOLA ERYTHROPS RED-FACED CISTICOLA Quite common by the river. Not recorded by Williams.

CISTICOLA FULVICAPILLA TABORA CISTICOLA Two pairs seen. Not recorded by

Williams.

CISTICOLA WOOSNAMI TRILLING CISTICOLA The song of this species was heard wherever there were open, rocky, bush-clad hillsides. it appeared to be quite common. The only other published records of this species in Kenya are from Rapogi and Oyugis, South Nyanza District, Sugg & Sugg (1972) *EANHS Bull.* 1972: 38-40.

Clive F. Mann,
Box 337 Kapsabet.

- - - - - - - - - - - - - - -

KISUMU HERONRY

Two years ago the Society organized a field meeting to the Kisumu Heronry, but it was not as spectacular as normal because of the poor rains. During 1973 the heronry was reasonably successful, but this year it promises to be well worth visiting.

I visited the heronry on 1st May 1974 with my parents and we made the following estimates and notes which are by no means accurate - most likely they are underestimates:

SPECIES	PAIRS	NOTES ON BREEDING
Phalacrocorax africanus Long-tailed Cormorant	50	sitting on eggs
Ardea melanocephala Black-necked Heron	100	nest building
Egretta alba Great White Egret	50	building
E. intermedia Yellow-billed Egret	100	building
E. garzetta Little Egret	5	building
Ardeola ibis Cattle Egret	200	building and sitting
Anastomus lamelligerus Open-bill Stork	100	building
Ibis ibis Yellow-billed Stork	50	building
Threskiornis aethiopica Sacred Ibis	500	sitting
Platalea alba Spoonbill	100	some sitting

By the time this note appears, the breeding should be in full swing with the fledging starting in early June and continuing for at least a month. Those visiting the heronry should aim to be there soon after dawn (to get the best light for photography). The approach track turns south off the Kisumu-Ahero road at 8 km from Kisumu and one may be able to drive up to half a kilometre along the track before it becomes waterlogged; thereafter, walk for about 3 km for which a guide (local *mtoto*?) is essential unless one knows the way.

John Harper,
Box 547 Kericho.

THE OCCURRENCE OF WADERS IN THE DAR ES SALAAM AREA OF TANZANIA - PART THREE

NUMENIUS PHAEOPUS WHIMBREL

Common non-breeding visitor and passage migrant to tidal sand flats, salt pans, lagoons, mangroves and coral coasts. Tends to form monospecific flocks, sometimes with odd Curlews and Godwits but will mix with Grey Plovers, particularly at tide roosts. Main arrivals in July and August and numbers build up slowly to reach a peak in October when flocks of over 100 are not unusual. In August and September and from November to March, flocks of 50 to 80 are more usual, and flocks rarely exceed 30 from April to July.

NUMENIUS ARQUATA CURLEW

Scarce non-breeding visitor and passage migrant to tidal sandflats, salt pans and lagoons. Invariably seen in the flocks of the much commoner Whimbrel. This species is little more than a straggler to the area although between August and June there are always a few birds about. It is most often recorded in October when parties of up to 12 have been seen.

LIMOSA LIMOSA BLACK-TAILED GODWIT

Vagrant. One record of a single bird with Bar-tailed Godwits at Msasani salt pans, October 1972. Backhurst *et al.* (1973 p.20) mistakenly attribute records of mine between October and December 1970 to this species. These records refer to Bar-tailed Godwits.

LIMOSA LAPPONICA BAR-TAILED GODWIT

Scarce but regular non-breeding visitor and passage migrant to tidal sandflats, brackish lagoons and salt pans. Usually with flocks of Whimbrel and Grey Plover. Recorded in every month from September to February and once in June. It is most in evidence in September/October (maximum 12, 14 October 1970) when the main passage appears to take place. From November to February odd birds and small parties are regularly recorded. The earliest date is 2 September 1971 and the latest, 24 February 1973. There is no evidence of spring passage except for a single bird (probably oversummering) on 2 June 1973.

TRINGA NEBULARIA GREENSHANK

Common non-breeding visitor and passage migrant to tidal sand flats, salt pans, lagoons, mangroves and sewage beds. Also recorded from Fresh water marshes and coral coasts. Often mixes with Marsh Sandpipers when feeding and with Whimbrel at tide roosts. Main arrival in August and from then until October flocks of up to 150 are regular. Between October and March flocks of up to 100 are more usual. There is little evidence of spring passage and from April to July flocks rarely exceed 50 birds and smaller numbers are more usual.

TRINGA STAGNATILIS MARSH SANDPIPER

Common non-breeding visitor and passage migrant to tidal sand flats, salt pans, lagoons, mangroves and sewage beds. Often mixes with Greenshank. Main arrival in mid September and flocks of around 50 occur regularly from then until late March. Maximum flock sizes have never exceeded 100. In March there is some evidence of return passage. From April to August small parties of up to 10 birds occur.

TRINGA GLAREOLA WOOD SANDPIPER

Common non-breeding visitor and passage migrant, mainly to fresh water pools and marshes, wet rice paddyfields, sewage beds, mangroves, brackish lagoons and salt pans. Most birds feed inland near freshwater but in late afternoon they flight to the coast to roost with other waders on salt pans. It is here that the largest flocks have been recorded. Smaller numbers regularly feed by brackish lagoons and in mangroves, although rarely under the canopy. The species has even been recorded along water channels in tidal sand flats. Main arrival in late July and early August and from then until late March flocks of 40-50 are not uncommon at favoured feeding marshes or at roosts. Occasionally larger numbers (over 100) are recorded and there is evidence of return passage in March when flocks of 80-100 have been seen (maximum flock size 120, 18 March 1971). Small numbers occur between April and July.

TRINGA OCHROPUS GREEN SANDPIPER

Scarce non-breeding visitor and passage migrant mainly to creeks in mangroves where it will mix with Wood Sandpipers. It has only once been recorded from a tide roost at salt pans. Very small numbers (maximum 3, 12 December 1970) have been recorded between 10 October and 12 December and between 13 March and 19 April, which may indicate that it is a bird of passage only.

TRINGA HYPOLEUCOS COMMON SANDPIPER

Fairly common non-breeding visitor and passage migrant mainly to salt pans, lagoons, mangroves, muddy creeks and estuaries, freshwater pools and marshes, sewage beds and coral coasts. It also occurs on open tidal sand flats, beaches and even on dry areas in acacia scrub. It shares with the Terek Sandpiper and the Three-banded Plover an attraction to muddy ground, especially along small creeks in mangroves, and it will feed under the canopy. This species tends to feed singly or in small parties, but in favoured localities will mix with other sandpipers. Although total numbers are relatively small, this is one of the most widespread of the visiting waders. Main arrival in August and September and from then until March scattered flocks of 15-20 are common. It is unusual for these flocks to exceed 30 birds. From March to July small numbers usually oversummer but I have seen no indications of possible breeding.

TRINGA TOTANUS REDSHANK

Probably a regular passage migrant in very small numbers. Two birds recorded in December 1970 and one in December 1971. In both cases the birds were with a flock of Greenshanks at a tide roost at salt pans and appeared to be of one of the grey eastern races.

ARENARIA INTERPRES TURNSTONE

Common non-breeding visitor and passage migrant to tidal sand flats, coral coasts, salt pans and mangrove creeks. Tends to form monospecific flocks at tide roosts, although it will mix particularly with Sanderling, Terek Sandpiper and Ringed Plover when feeding along the strand. Main arrival in late October although the first birds precede this by up to ten weeks. Between October and March flocks of up to 50 are common while larger flocks (up to 80) have been recorded in late March, indicating a return passage. Small numbers (up to 20) are present during the rest of the year. This species feeds mainly on the coast and usually roosts above HWM on sandy beaches (often with Sanderling) or coral platforms. Very high tides drive it inland to join the tide roosts of other waders on the salt pans, and it is at these times that the largest numbers are recorded.

GALLINAGO MEDIA GREAT SNIPE

Probably a regular spring passage migrant in small numbers. I have only one record of at least 3 birds flushed from a grassy swamp near Mbegani in April 1973 but suitable habitats for the species are limited and rarely visited.

W.G. Harvey,
British Council,
Djalan Imam Bondjd,
57 - 59 Djakarta,
Indonesia.

(It was implied in the May *Bulletin* that the above would be the final part of this article; it is hoped that the concluding part will appear next month. Editor.)

EASTER AT LAKE BARINGO

My wife and I were invited to stay at the Lake Baringo Lodge over Easter this year, and as it was a very wet time, the warmer drier climate there was very much appreciated. We have been to Baringo many times and have always enjoyed the flora and fauna there, and there is always something new to be seen.

Baringo lies at an altitude of 1025 m and is about 110 km north of Nakuru on an all-weather road, the first 30 km of which are tarmac. The Lake is marked by the very brown colouration of the water, due to the silt in suspension. This is mainly due to the very bad erosion in the surrounding countryside which means that a large mass of silt is carried into the lake. It is very shallow and has never been clear in living memory, although it used to be a lot better than now. Sporadic winds whip the surface, which is another factor affecting the water. It has a fish population of tilapia, but these do not grow to any great size, due to the lack of feeding stuff, which in turn is due to poor photosynthesis in the murky water. The fishing is also probably unbalanced, with immature fish removed all the time.

The lake has several interesting islands, which no doubt have local names, but the main ones are known to us as North, Main, Teddy Bear and Gibralter Islands. These have interesting plant populations and the most striking is the large number of desert roses *Adenium obesum*, ranging through all shades, from dark red to white. These are the Somali strain, having thin narrow leaves, as compared with the broader leaves of the species found in Tsavo and elsewhere.

North Island is particularly attractive, having a very large population of desert roses, as well as other interesting trees. Main Island has hot sulphurous springs bubbling out of the ground, and these are well worth a visit. The whole Baringo area is normally very dry and eroded, but with the rains this year everything was green and pleasant.

The main feature was the carpet of yellow flowers, covering whole areas of the landscape and presenting a most beautiful sight. This is the creeping annual *Tribulus terrestris*. The seeds of this plant are triangular and sharp pointed, and are most painful if one steps on them in bare feet. The plant is grazed by all types of stock, and is said to be poisonous. When eaten in quantity it causes bloat and the Suk expect about 5% of their herds to be killed through eating the plant. However, it is a case of 'Hobson's Choice' where grazing is so short.

The area and the islands have a number of succulent plants which are interesting. The most obvious is *Caralluma retrospiciens* with conspicuous heads of dark purple flowers. *Caralluma gracilipes* can be seen, and also *C. socotrana* which was in flower when we were there, with dark brick red flowers. It has a powerful and pungent scent, which is notable even in this genus of evil-smelling flowers! *Edithcolea grandis* occurs, and the aloes and sansevieras are interesting.

North Island is crying out to be made into a plant sanctuary on similar lines to Mutomo, near Kitui, before the goats and cattle which are ferried over when grazing is short destroy its flora.

The bird life at Baringo is exceptionally varied, and a list of species seen by Terence Allen during a four day visit in February has been deposited in the Library. The more uncommon species include Hemprich's Hornbill *Tockus hemprichii*, Bristle-crowned Starling *Onycognathus salvadorii*, Verreaux's Eagle Owl *Bubo lacteus* and Curly-crested Helmet Shrikes *Prionops plumata*. Verreaux's Eagle Owl can be seen fairly easily, if one knows where to go.

The Tugen make small canoes from 'ambatch' *Aeschynomene elaphroxylon*, which is a pithy shrub and grows in water on the edges of swamps and rivers at this elevation. They paddle these canoes in a partially water-logged condition across the lake, using hand paddles, and these canoes are an interesting survival of an age-old methos.

It is sad to see the surrounding country being progressively devastated by poor soil cultivation methods and goats. The trees do not escape from the latter, and the Tugen climb them and lop branches for goat fodder when there is no other vegetation offering. Past experiments in land reclamation and regeneration have proved very successful if grazing is controlled and goats eliminated. However, all these experiments appear to be of no avail, and the local people carry on with their destructive practices, apparently without guidance or control.

There is a comfortable camp on Main Island, run by Jonathan Leakey, and

Betty Roberts has self-service cottages and camp sites. Lake Baringo Lodge, which has a swimming pool, provides an excellent centre for visiting the district. Boats to visit the islands can be hired through the Lodge. Michael and Joan Skinner, who own and run the Lodge, are very knowledgeable on local conditions and customs, and we can recommend a weekend, or a few days, at Baringo for anybody who has not yet been there and who wishes to see a new and interesting part of Kenya.

I will be suggesting a Natural History Weekend at Baringo for the Society for 29th/30th November and 1st December this year, so look out for an announcement nearer the time if you are interested.

Tom Grumbley,
Box 42011,
Nairobi.

- - - - - - - - - - - - - - -

RINGING NOTICE

The ringing year ends on 30th June so please send in schedules, whether complete or not, for all birds ringed up to this date, as early in July as possible. Please also send details of retraps and controls - if you have a lot, please drop me a line and I will send some retrap/control forms, catalogue number ERS/99-4b. Please let me have all the 'paper work' as soon as possible so that I can get on with the next report, which will contain the list of Palaearctic birds ringed in 1973/74, as well as those ringed in 1972/73.

Graeme Backhurst,
Ringing Organizer,
Box 29003,
Kabete, Nairobi.

- - - - - - - - - - - - - - -

BULLETIN INDEX FOR 1973

The index to the *Bulletin* for 1973 is being distributed with this issue. It was kindly prepared by Daphne Backhurst.

Editor.

- - - - - - - - - - - - - - -

REQUEST FOR INFORMATION

I am investigating the genetics of shell colour polymorphism in the land snail *Limicolaria martensiana* (Pulmonata: Achatinidae), a species which is widespread in East Africa. It can probably best be described as looking like a small and slender *Achatina fulica* - the East African Giant Snail. Like *Achatina, L. martensiana* usually has a brownish-yellow ground colour covered by dark brown verticle 'streaks', but in some populations paler varieties also occur. When adult, the shell has a height of about 40 mm, a maximum width of 10-20 mm, and 6-8 whorls. Diagrams of the common varieties are given in D.F. Owen's *Animal Ecology in Tropical Africa* (Oliver & Boyd, 1966) as well as in his scientific papers on polymorphism in *L. martensiana* (e.g. *J. Zool., Lond.* 159: 79-96 (1969)). I would be very pleased to receive live and/or dead material that more or less fits the above description. Live snails should be packed in a strong container, such as a tin. If the packing material (newspaper is ideal) is plentiful and dry the snails will aestivate and are then less susceptible to the rigours of the postal services. The package should be sent airmail and should include a note giving a brief description of when and where the snails were found. I shall gladly refund the cost of postage.

John A. Allen,
Department of Zoology,
Box 35064,
Dar es Salaam,
Tanzania.

- - - - - - - - - - - - - - -

WHITE-CHEEKED TERNS *STERNA REPRESSA* NEAR DAR ES SALAAM, TANZANIA

In the August 1972 *Bulletin* I recorded the sighting of a probable White-cheeked Tern at Dar es Salaam in June 1972 (Harvey 1972). From April to June 1973 and in November 1973 I made a number of further sightings of terns which also appeared to be of this species. The sightings were as follows:

NUMBER	DATE	PLACE
1	19.4.73	Msasani lagoon
8	3.5.73	Msasani lagoon
c.5	6.5.73	Dar es Salaam habour
1	2.6.73	Msasani lagoon
1	7.6.73	Msasani lagoon
2	16.6.73	Msasani lagoon
6	17.6.73	Dar es Salaam habour
2	20.6.73	Msasani lagoon
1	30.6.73	Msasani lagoon
3+	4.11.73	Kunduchi beach

The Msasani birds appeared after heavy rain and were found resting on the mud at the edge of a brackish lagoon. They were bedraggled and allowed very close approach. Most of the plumage description that follows was taken from these birds which I was able to compare directly with Whiskered Terns *Chlidonias hybrida* and White-winged Black Terns *C. leucopterus*. The harbour birds were only seen in flight among larger numbers of Lesser Crested Terns *Sterna bengalensis* and probable Roseate Terns *S. dougallii*. The Kunduchi birds were seen at rest on the edge of a flock of 100+ Roseate Terns, 400+ Lesser Crested Terns and 50 Swift Terns *Sterna bergii*.

All the White-cheeked Terns were in similar plumage (either non-breeding or subadult) with the November birds most advanced towards full adult breeding dress. The following is a description of a typical individual in non-breeding plumage.

BUILD a small, rather squat dark tern not unlike a marsh tern (*Chlidonias*) at rest although with larger, thinner bill and longer tail and wings. In flight confusingly like other small *Sterna* terns. The short tarsii were much more like those of Arctic Terns *S. paradisaea* than any of the locally recorded *Sterna* spp.

HEAD white with black hind crown and nape the lower border of which extends in a point to the eye and is invariably incurved.

UPPERPARTS grey on mantle, rump and tail becoming progressively paler towards the tail, but never white. Tail deeply forked, often fanned in flight and with darker outer tail feathers.

WINGS primaries dark grey with white quills to the outer ones. Secondaries whitish with greyer tips. Lesser coverts grey as mantle; secondary coverts greyish. Greater coverts blackish, forming a distinct bar both at rest and in flight.

UNDERPARTS considerable individual variation ranging from whitish to grey. Never pure white or pinkish and never dark blackish grey as in breeding dress. November birds darkest of all.

SOFT PARTS typically slender *Sterna* bill though shorter than Roseate's. Always all-black. Tarsi and toes brownish orange to brownish red.

The above records suggest that the White-cheeked Tern is a regular non-breeding visitor in very small numbers to the Dar es Salaam coast from April to June and an occasional visitor at other times of the year.

W.G. Harvey,
British Council,
Djalan Imam Bondjd,
57 - 59 Djakarta,
Indonesia.

- - - - - - - - - - - - - - -

SUNBIRD RESEARCH

Dr Frank B. Gill is continuing his research on sunbirds in Kenya, and would be very grateful to know of any large patches of *Leonotis*. Please inform either A. Forbes-Watson or Miss D. Angwin at the National Museum, Box 40658, Nairobi. Dr Gill would also like to hear from anybody who has good photographs of any sunbird species. His address is The Academy of Natural Sciences of Philadelphia, 19th and the Parkway, Philadelphia, Penn 19103, U.S.A.

- - - - - - - - - - - - - - -

AGNEW & HANID - FLORA OF UPLAND KENYA

This book, whose forthcoming publication was announced in the February *Bulletin*, is not now expected until late in the year, but the publishers would be glad to know about how many copies members of the supporting societies will want. Members will recall that this Society gave 2000/- towards the cost of publication, and in return members will be able to buy copies at a reduced price, probably about 120/-. The proofs were shown at the A.G.M. Any member who expects to purchase a copy is asked to send in his name to the Librarian, or to the Hon. Secretary at Box 44486, Nairobi, as soon as possible please.

Daphne Collins,
Hon. Secretary.

- - - - - - - - - - - - - - -

OBITUARY

On the night of 3rd May 1974 Leslie Desmond Edward Foster Vesey FitzGerald passed away in his sleep of heart-failure, at the age of sixty-four, whilst staying with friends at Karen.

Desmond, or Vesey as he was known by his friends, was an all-round naturalist; he trained as an entomologist at the Agricultural College, Wye, and then went to the Tropical Agricultural College, Trinidad to complete his training, after which his main line of work was that of biological control of insects.

After a short time in British Guiana working on the pests of sugar cane, he returned to England and, having some money, bought his first motor-car but soon tired of a life of leisure and got a job in Nigeria. Soon he was switched from there to the Seychelles to work on the Scale insects of Coconut Palms using the *Cocunelid* Ladybird as a control; this work was very successful. Whilst so engaged he travelled extensively up and down the East African coast from Kenya as far south as the Rovuma River in search of Ladybirds.

It was about this period - 1936-1938 - that I first met Vesey when he visited Amani in the East Usambara Mountains, in the course of his search; he accompanied me to various parts of the mountains on my botanical excursions in the rain forest. Even then he was keenly interested not only in the insects but in frogs, toads, snakes, lizards, small mammals and birds. He was also collecting plants, sending me specimens of *Utricularia*, from the Island of Mafia collected in 1936.

He then went to Malaya just previous to the War from which he escaped via Sumatra and Ceylon. After this he was appointed Senior Locust Officer in the Middle East Anti-Locust Unit in Arabia for about five years during which he was awarded the M.B.E. for his work.

From Arabia he came to the Game Department, Kenya in which he served for two years, then was appointed Locust Officer, Red Locusts, where he worked in the Rukwa Rift and Mwera Wantipa, Northern Rhodesia. It was then that Vesey took a greater interest in grasses, sedges and, to a certain extent, in ferns.

On his retirement from the Red Locusts, Dr John Owen, O.B.E. offered him the post of Ecologist to the Tanzania National Parks where he made his base at Momella, the headquarters of Arusha National Park, where his interest in grasses, sedges and ferns was greatly increased by the richness of these groups of plants by which he was surrounded.

Vesey was a great conversationalist, a good safari companion from whom one learned a lot about natural history, and a very charming and generous host to visitors from all parts of the world. We ought to be glad of his peaceful passing but it is a grievous loss that it was so early for one with so much still to accomplish.

P.J.G.

- - - - - - - - - - - - - - - -

FUNCTIONS

Saturday/Sunday 8/9 June 1974: Camp at Miss Joyce's Farm, Kilima Kiu. On the Sunday morning Mr Gillett will lead a plant identification walk. The farm is approximately 80 km from Nairobi; 73 km along the Mombasa road turn left at the signpost marked 'Joyce, Kilima Kiu, Private Road'.

Monday 10 June 1974: 5.15 p.m., Museum Lecture Hall; Mr Gillett will give a talk on Plant Identification - on specimens collected at Kilima Kiu.

Saturday 15 June 1974 - FOR BEGINNERS ONLY: An introduction to the identification of birds; one hour in the Museum, two hours in the field. Please meet in the Bird Hall of the National Museum, at 2.30 p.m.

Monday 8 July 1974: Lecture at 5.15 p.m. - details to be announced.

Saturday/Sunday 13/14 July 1974: Camp at Mr Eric Lucas' farm, Ol 'Kalou. Camp will be on the banks of the Melawa River. Interesting river valley for birds, and good variety of butterflies and moths. Any lepidopterists with a light trap - it would be worthwhile to bring one. Trout fishing in the Melawa is now restricted to members of a consortium, who can introduce guests at 25/- per day. Ol 'Kalou salient has now appointed fishing scouts to enforce this.

Sunday 21 July 1974: All-day 'dudu crawl' led by Mr Mike Clifton.

Saturday/Sunday 17/18 August 1974: Camp at Lake Hannington - details later.

September: Naivasha Study Camp weekend - details later.

- - - - - - - - - - - - - - -

NEW MEMBERS - JUNE 1974

Full Members:

Mr D.R. Aspinwall, Box RW.93, Lusaka, Zambia.
Mr M. Ball, Box 40677, Nairobi.
Mrs Barbara Charlton, Box 7, Kikuyu, Kenya.
Mr R.J. Dowsett, National Museums, Box 498, Livingstone, Zambia.
Mr J.C.A. van Etten, Box 30772, Nairobi.
Lt. Colonel Hilary Hook, Kiserian, Box 45, Kiganjo, Kenya.
Mr D.K. Jones, Lenana School, Box 30253, Nairobi.
Mr G. Matzke, Miombo Research Centre, Box 25295, Dar es Salaam, Tanzania.
Miss Jean Minette, c/o Veterinary Research Laboratory, P.O. Kabete, Kenya.
Rev. Hermann Pelchen, Box 47097, Nairobi.
Mrs Malin Wenner, Swedish Embassy D.C.O., Box 44391, Nairobi.

Junior Member:

Miss Anngret Pelchen, Box 47097, Nairobi.

- - - - - - - - - - - - - - -

QH
7
E135
ST

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN JULY 1974

CONTENTS

The occurrence of waders in Dar es Salaam - - - - - - - - - - - - - - - - 90
Ringing note - 92
Further frigate birds on the Kenya coast - - - - - - - - - - - - - - - 93
Freshwater snails, schistosomiasis or Bilharzia - - - - - - - - - - - - 93
Icterine Warbler and Chiffchaff on Mount Kenya - - - - - - - - - - - - 95
Editorial help required - 95
Unusual behaviour of Rufous Chatterers - - - - - - - - - - - - - - - - 96
A visit to Texel - 97
Marked Great White Pelicans - 98
Letters to the Editor - 99
Society functions - 100
New members - July 1974 - 100

THE OCCURRENCE OF WADERS IN THE DAR ES SALAAM AREA OF TANZANIA - PART THREE

TRINGA TEREK TEREK SANDPIPER

Common non-breeding visitor and passage migrant to tidal sandflats, open mangraoves and creeks, salt pans, lagoons and sewage beds. It favours muddy ground near water, especially in areas of cleared mangroves where the stumps alone remain and along the edges of creeks where they enter the tidal flats. Feeds in scattered flocks often mixing with Turnstones. Roosts with other waders in tide roosts on salt pans. Recorded in every month although in variable numbers from year to year. Main arrival in late September through to early November when flocks of up to 80 occur. From November flock sizes vary from less than a dozen to a maximum of 120 (December 1971). Return passage apparent in late March and April with flocks of up to 80 common again. Between May and September numbers are especially erratic but flocks of between 20 and 40 are always recorded for at least six weeks during this period, suggesting a small oversummering population moving up and down the coast.

CALIDRIS CANUTUS KNOT

Vagrant. One record of at least three at a tide roost on salt pans, 17 November 1970 (Harvey 1971).

CALIDRIS FERRUGINEA CURLEW SANDPIPER

Very common non-breeding visitor and passage migrant to tidal flats, salt pans, lagoons, coral coasts, fresh water marsh and sewage beds. Often mixes with other waders, particularly Little Stints. Main autumn arrival from mid July to late August and flocks of up to 800 have been recorded up to late September (maximum 1000+, 18 September 1973). From October to March flocks of 300-400 are more usual and there is some evidence of spring passage in late March and April when flocks of up to 600 occur. From April to July variable numbers oversummer with some evidence of a small build up in June. In May, flocks of over 50 are rarely recorded but flocks of up to 200 birds in non-breeding dress occur irregularly in June and early July.

CALIDRIS MINUTA LITTLE STINT

Very common non-breeding visitor and passage migrant to tidal sand flats, salt pans, lagoons, salt flats, coral coasts, fresh water marsh, wet rice paddyfields and sewage beds. Often mixes with other waders particularly Curlew Sandpipers. Main autumn arrival from late June and from then until late October flocks of 400-500 with peaks of over 600 having been recorded. From November to April flocks of 250-300 are more normal and there is little evidence of a spring passage. Numbers between April and July vary considerably both from year to year and from week to week. In June 1971 flocks of 40-50 were commonly recorded, whereas the maximum flock size at the same site in June 1973 was 15.

CALIDRIS ALBA SANDERLING

Common non-breeding visitor and passage migrant to tidal sand flats and sandy beaches. Generally roosts above HWM on beaches but individuals regularly recorded with tide roosts of other waders at salt pans and, occasionally feeding by brackish lagoons on salt flats. Tends to form monospecific flocks but will mix with Turnstones and White-fronted Sand Plovers along the strand and with Curlew Sandpipers and Little Stints on tidal sand flats and at tide roosts. Main autumn arrival is in early October but the first birds precede this by up to eight weeks. From October to April flocks of around 50 are common and in favoured localities, particularly at high tide, flocks of over 100 have been recorded. There is no evidence of peaks in numbers indicating marked passage however. The species has been recorded in every month but only odd birds and small parties oversummer.

LIMICOLA FALCINELLUS BROAD-BILLED SANDPIPER

Vagrant. One record of a single bird on the edge of a brackish lagoon, 2 August 1971 (Harvey 1971).

PHILOMACHUS PUGNAX RUFF

Rather scarce non-breeding visitor and passage migrant to brackish lagoons, salt pans, mangroves, sewage beds, fresh water pools and marsh and wet rice paddyfields. It mixes freely with other waders, particularly Wood Sandpipers but numbers vary a great deal and most birds are probably passing through the area. Between August and April parties of up to 20 have been recorded although smaller groups of 5-10 are more usual. Larger numbers (maximum 40, 19 April 1973) have been seen in September and April, indicating passage. A few birds oversummer so that the species has been recorded in every month. Compared with the very large flocks which occur inland in East Africa these numbers are very small and it would seem that this is one of the few Palaearctic waders whose main migration route is inland.

HIMANTOPUS HIMANTOPUS BLACK-WINGED STILT

Both a regular breeding visitor and non-breeding visitor and passage migrant to brackish lagoons, sewage beds, salt pans and tidal sandflats. The breeding of two pairs was first noted on a brackish lagoon at Msasani near Dar es Salaam in June 1971 (Harvey 1971). In 1972 five pairs attempted breeding without success and up to four pairs were also unsuccessful in their attempts to breed in 1973. The breeding birds first appear in late May and numbers build up rapidly to reach a peak in late June or July (maxima, 1971: 20; 1972: 32; 1973: 50). Only a small percentage of the pairs present attempt to breed in June and July although most of the birds are paired, maintain feeding territories and noisly try to drive off intruders to the area. During September the numbers decline rapidly. In 1972 at least one recently fledged juvenile arrived with the adult birds and this, together with the fact that so few of the pairs attempt breeding, suggests that the birds have come from another breeding site in East Africa. During this period (May to September) stilts have been recorded from other coastal lagoons as well as sewage beds, but breeding has only been recorded from one other site apart from Msasani (one pair at Kerege in June 1973).

From late September to April smaller numbers of stilts occur in open mangrove creeks, brackish lagoons, salt pans, tidal sand flats and sewage beds. Parties of up to 12 are not uncommon but the numbers are very variable (e.g. maximum 45, October 1972). I think that most of these birds are different from the breeding population and it is likely that they are Palaearctic migrants.

ROSTRATULA BENGHALENSIS PAINTED SNIPE

Probably a local breeding resident in very small numbers. Recorded from freshwater pools and grassy swamps and the margins of a brackish stream near mangroves. I have only recorded the species in September, November and December which may indicate that it is no more than a seasonal visitor during these months. However it is a notoriously difficult bird to see and my visits to suitable sites are infrequent. All records refer to one or two birds.

REFERENCES

Backhurst, G.C., Britton, P.L. & Mann, C.F. 1973. The less common Palaearctic migrant birds of Kenya and Tanzania. *Jl E. Africa nat. Hist. Soc. Nat. Mus.* 140: 1-38.

Fogden, M.P.L. 1963. Early autumn migrants in coastal Kenya. *Ibis* 105: 112-3.

Harvey, W.G. 1971. A Tanzanian record of Knot *Calidris canutus*. *EANHS Bull.* 1971: 75.

———— 1971. The second Broad-billed Sandpiper for Tanzania. *EANHS Bull.* 1971: 161.

———— 1971. A breeding record of Black-winged Stilts *Himantopus himantopus* in coastal Tanzania. *EANHS Bull.* 1971: 176.

———— 1972. Caspian Plovers *Charadrius asiaticus* at the coast. *EANHS Bull.* 1972: 175.

———— 1973. Lesser Golden Plover *Pluvialis dominica* near Dar es Salaam. *EANHS Bull.* 1973: 84.

Moreau, R.E. 1966. *The bird faunas of Africa and its islands.* London: Academic Press.

———— 1972. *The Palaearctic-African bird migration systems.* London: Academic Press.

Sutton, J.E.G. (Ed.) 1970. Dar es Salaam: City, port and region. *Tanzania notes Rec.* No.71.

W.G. Harvey,
British Council,
Djalan Imam Bondjd,
57 - 59 Djakarta,
Indonesia.

- - - - - - - - - - - - -

RINGING NOTE

Ringers, please send me all your schedules and retraps/controls as early in July as possible. Thank you.

Graeme Backhurst,
Box 29003, Kabete, Nairobi.

- - - - - - - - - - - - - -

FURTHER FRIGATE BIRDS ON THE KENYA COAST

Several sightings of unidentified immature frigate birds *Fregata* sp. on the Kenya coast have been reported in this *Bulletin*. Forbes-Watson (*EANHS Bull*. 1972: 64) has pointed out that only two species (*minor* and *ariel*) are at all likely to occur in our waters, and that the only positively identified individual is a Greater Frigat Bird *F. minor* collected at Kipini.

On 29th August 1971 I found a bleached *Fregata* skull on a beach near Kiunga, close to the Somalia border, which represents a second Kenya record of *minor*. The bill measures 115 mm and is too long for the much smaller *ariel*.

While watching gulls gathering to roost at Nyali Beach, Mombasa on 13th January 1974 I noticed an immature frigate bird gliding over my head. It was watched for 20 minutes as it glided out to sea and eventually disappeared from view over Bamburi Beach at 18.40 h. It was unmistakably a frigate bird, mainly blackish or very dark brown, but with white head, bill, feet and belly, the latter area extending some distance under both wings.

On the evening of 2nd February 1974, Pat Donnelly and Peter Squelch watched a frigate bird gliding along the beach at Watamu. Their description suggests that this was very likely the same individual seen three weeks earlier at Nyali, some 100 km south-west.

While fishing some 60 km out to sea off Shimoni, close to the Tanzanian border, on 24-25th March 1974, Pat Hemphill saw seven or eight frigate birds including some adult males. They were associated with masses of Bonito and other fish as were numbers of boobies *Sula* sp.

The last of these records suggests that this and other pelagic species may be regular or common out to sea, and I would be glad to receive and co-ordinate any casual observations by fishing enthusiasts.

Peter L. Britton,
Box 90163,
Mombasa.

- - - - - - - - - - - - - - -

FRESHWATER SNAILS, SCHISTOSOMIASIS OR BILHARZIA

Theis note is prepared at the request of a few members who have asked if it were possible to tell whether various bodies of water (dams, lakes, streams, swamps etc.) were free or infested with the organisms which cause the disease known as schistosomiasis or Bilharzia (after Bilharz, 1851). The answer to the query is 'No', unless extensive examination is made for the intermediate stage of the parasite which lives in certain freshwater snails. I would regard all water as suspect unless above 7000 ft (=2134 m) or where the water was really fast flowing.

The disease occurs in most districts in East Africa and with the widespread movement of potential human reservoirs, the incidence could be even more widespread, although probably only in many small localised foci. Bodies of water may be infested for short periods only, depending on human contamination and the presence of the intermediate host snail.

I showed, in 1948 during extensive surveys, that most of the streams in Nairobi were contaminated from time to time, particularly during periods of low water in the dry season. Many children were found infected having played in the residual pools or even when getting their feet wet while crossing a stream on their way to school. The Nairobi Dam is a dangerous potential source of infection.

The life history of the trematode worm which causes this very debilitating disease is as follows: water is contaminated by eggs passed in the urine or faeces of infected people. The eggs hatch in water to forms known as miracidia and these then find their way into suitable intermediate hosts, i.e. certain species of freshwater snails. In the snail they develop in the liver and multiply until the cercarial stage is reached. Cercariae are liberated into the water. They are active free-swimming, minute, just visible, fork-tailed creatures. This is the stage that penetrates the skin of the victim when they make their way, via the blood vessels, until they reach the liver or bladder and settle down to develop into mature male and female worms, and egg production begins. Thus the cycle starts all over again.

The worms are known as *Schistosoma haematobium* of urinary infection and *S. mansoni* for the rectal infection. *S. bovis* infests cattle along with the allied Liver Fluke *Fasciola gigantea*. Not all freshwater snails can act as intermediate hosts and it appears that there is considerable host specificity, however, as a guide, small snails with a sinistral (left) aperture, as *Bulinus* spp. are hosts whereas species with dextral apertures, as *Lymnaea* spp. are not hosts of the human type of cercariae but the most important snail is probably the "ram's horn" type, *Biomphalaria* spp. If these snails are seen in the water then that water is suspect, particularly if near human habitation or on any drainage system. Furthermore it has been shown, in recent years, that the Baboon can be a host of the worm and naturally infested. Even that delightful pool far from the haunts of man may be infested with suitable snails invaded, and so infested with the intermediate stages of the worm, so where baboons are plentiful near streams or rivers, avoid the water; at least stand it for 24 h or boil it if it is necessary to use it. Cercariae are short lived but they are shed daily over long periods and one snail can produce thousands. Invasion of the skin by cercariae is rapid so that immersion of the legs or hands in infested water even for a short while can be dangerous, as I well knew from laboratory experience while working with cercariae. A point of interest is that the snails in Lake Naivasha do not appear to be infested, the reason for this is unknown.

Finally, freshwater snails may also harbour the early stages of many other species of worm which infest fish, frogs, reptiles, birds and wild mammals. In some places people have reported feeling a stinging or tingling sensation while in water, akin to nettle rash. This might be due to attempted invasion by non-human type cercariae or the "stings" from the waterweed Bladderwort *Utricularia*.

G.R. Cunningham-van Someren,
Box 24947,
Karen,
Nairobi.

- - - - - - - - - - - - - - -

ICTERINE WARBLER AND CHIFFCHAFF ON MOUNT KENYA

On 18th March 1974 along the Naro Moru track on the western slopes of Mount Kenya we watched an Icterine Warbler *Hippolais icterina* for at least 30 minutes, feeding in the mixed *Hypericum* and bamboo zone. It was clearly one of the yellow *Hippolais* warblers and the following diagnostic features (from other species of the genus, especially the West African-wintering *H. polyglotta*) were observed: relatively large bill, peaked crown, wings projecting well beyond the base of the tail, pale patch in the folded wing and harsh 'tac' call. Although Backhurst, Britton & Mann (1973) give only nine previous dated records for this species in Kenya and Tanzania, they are mainly for the period February - April and the present record is in line with the suggestion that this species uses a more easterly route on return passage and is the time when it should be looked for in Kenya.

On the same day and in the same locality a Chiffchaft *Phylloscopus collybita* was seen and heard singing. (There can be no doubt from the records which are now accumulating (see Backhurst *et al.* 1973), that this species is a regular winter visitor to the montane highland forests.)

REFERENCE

Backhurst, G.C., Britton, P.L. & Mann, C.F. 1973. The less common Palaearctic migrant birds of Kenya and Tanzania. *Jl E. Africa nat. Hist. Soc. Nat. Mus.* 140: 1-38.

B.S. Meadows,
Box 30521,
Nairobi.

J.K. Weston,
63 Woodberry Way,
Walton-on-the-Naze,
Essex,
England.

Neither of the above two species has been caught in mist netting operations in eastern Kenya, even though many thousands of other Palaearctic warblers have been ringed. It is also worth remembering that a number of these ringing sites are near areas of montane forest which might be expected to hold wintering Chiffchaffs. The Blackcap *Sylvia atricapilla* provides a similar example: over 5000 Palaearctic passerines (mostly warblers) have been ringed at Ngulia in Tsavo National Park (West). Montane forests are found nearby (e.g. on the Chyulus and Kilimanjaro) yet only about ten Blackcaps have been caught at Ngulia although the species winters commonly in the forest zones. Ed.

- - - - - - - - - - - - - -

EDITORIAL HELP REQUIRED

Both the Editor and the Assistant Editor of the Society's *Journal* are out of East Africa. Any Nairobi resident who feels that he or she might be able to help in editing the *Journal* is asked to please get in touch with the Secretary Mrs Collins as soon as possible. Ed.

UNUSUAL BEHAVIOUR OF RUFOUS CHATTERERS

At about 17.30 h on 29th October 1973 I was driving slowly through an area of thick coastal scrub and baobab trees near Kunduchi, about 22 km north of Dar es Salaam, Tanzania. I heard from the scrub the calls of a party of Rufous Chatterers *Turdoides rubiginosus* . I stopped the car about 4 m from the nearest bushes and stayed inside to observe them. A party of four adult and two juvenile chatterers were moving through the scrub close to and on the ground. On reaching a small patch of sand beneath the nearest bushes they stopped and their calls became more intense. They gathered in a fairly close-knit group in the sand and began preening energetically. As they preened they continued to call periodically, usually in chorus, and shuffled round in the sand. Their actions resembled a combination of normal preening and dust bathing and I was strongly reminded of the behaviour of a Song Thrush *Turdus philomelos* that I watched anting in England in 1965. This reminiscence was enhanced by the nervous, excited actions of the birds and, if I can be forgiven the anthropomorphism, the almost 'ecstatic' look in their half-closed eyes.

After about five minutes one of the adults hopped forward from the group into a more open area and, carrying a long, apparently white object in its bill. It hopped for about a metre then dropped the object and began to preen even more excitedly over it. The other chatterers followed (the adults coming first) and the calling increased in intensity. At this stage the calling appeared to have attracted four Arrow-marked Babblers *Turdoides jardinei* which, although not descending on to the sandy patch, hopped round the surrounding scrub calling.

The chatterers formed another group round the white object and continued their actions as before. As the light was failing I got out of the car and, disturbing the birds, went forward to find that the white object was, in fact, a small greenish-blue snake about 15 cm long and dead. It was unmarked except for two or three small holes in the head and neck. About six ants were found in the vicinity of the snake on the sand. It is possible that the snake was dropped by one of a pair of Wahlberg's Eagles *Aquila wahlbergi* which were feeding small young in a nest in a coconut palm about 20 m away.

There would seem to be three possible explanations for the chatterers' behaviour:

1. The most likely is that they were anting, using ants attracted to the dead snake. If so they must have swallowed the ants after using them. The snake may have been carried forward so that the birds could see the ants more easily in the fading light.

2. In view of the scarcity of ants it is possible that the birds were somehow extracting venom from the snake's poison sacs and using this to stimulate their skin in the same way as the formic acid of ants is used. This would explain the holes in the snake's head and neck although I have never heard of such an occurrence before. Unfortunately I did not collect the snake and do not know if it had poison sacs.

3. A third explanation might be that the birds were engaged in a confidence building excercise of intense preening and calling at the sight of the snake. Passerine birds invariably react to the presence of snakes, both alive and dead, although I have never noted this sort of reaction before. In these circumstances it must be unusual for passerine birds to pick up and carry snakes but this might be explained by the relative size of the snake compared with the chatterers.

W.G. Harvey,
British Council,
Djalan Imam Bondjd,
57 - 59 Djakarta,
Indonesia.

- - - - - - - - - - - - - - -

A VISIT TO TEXEL

From a natural history point of view, the high spot of a recent trip to Europe was a week in Texel, and I should like to draw the attention of members to Texel if they do not already know it, as a place of special interest. It is the southernmost and largest of the Friesian Islands in the north of the Netherlands, and though it is only 25 km long and much of it closely cultivated and thickly populated, and the west coast also a popular seaside resort, it is dotted with nature reserves and swarming with birds. Guided bird walks are organized, for which you should get tickets in advance as numbers are restricted. A member of our Society was made to feel very welcome, and even if the leader does not speak English, there is pretty certain to be someone in the party who does. The leader will have in his pocket the Dutch edition of "Peterson, Mountfort & Hollom", and you will have the English edition in your's. Each gives bird names in the language of the other, and what with the illustrations and the scientific names you will get on quite well without having to take along, as we sometimes did, Priscilla Allen (new and revised edition) aged five, as an interpreter. She attends a Dutch kindergarten and is completely bilingual, but perhaps hardly yet able to explain the differences between a lark *Alauda arvensis* and a Meadow Pipit *Anthus pratensis*.

Some of the reserves are under the care of the Netherlands Society for the Promotion of Nature Reserves and some under that of the State Forestry Department. The local representatives of both were extremely kind to us and took us on special walks. Mr Boot of the N.S.P.N.R. took us to De Bol, which is a truly wonderful place, a sea of purple orchids (*Orchis maculata* and *morio* and other species as well), mixed with campion, ragged robin, yellow rattle, eyebright, red clover, daisies and buttercups, to name but a few, for we are not botanists. In the midst of all this Mr Boot showed us many nests. Those of the Redshank *Tringa totanus* surely no one could find without seeing the birds come or go, and as the grass is bent right over them. Oystercatchers *Haematopus ostralegus* seem to like to line their nests with goose droppings, perhaps for extra warmth. The Ringed Plovers *Charadrius hiaticula* on the other hand had lined their's with bits of broken shell, and the Lapwing *Vanellus vanellus* and Common Tern *Sterna hirundo* with grass. Avocets *Recurvirostra avosetta* are very numerous in Texel. Mr Boot said there were 43 nests in De Bol alone. Though many still had downy young, their main breeding season was over. They are extremely aggressive at their breeding places. At Potten, another reserve where the two oldest members of our party stationed themselves one day in deck chairs while the others went on a more energetic expedition, it was fun to watch the Avocets attacking Jackdaws *Corvus monedula*, Shelduck *Tadorna tadorna* and anything else that flew over. But when a Herring Gull *Larus argentatus* appeared, the whole community, Black-headed Gulls *L. ridibundus* and all, seemed to leap into the air to drive it away.

Mr Mantje of the Forest Department took us to De Muy in the sand dunes. The Forest Department besides planting and looking after trees is also responsible for keeping the dunes covered, and a botanist could have fun here too. At De Muy there is the most northerly breeding colony of Spoonbills *Platelea leucorodia*, and in the bushes in the warm hollows of the dunes we listened to a Nightingale *Luscinia megarhynchos* singing, in the middle of the day, and were shown the nest of a Willow Warbler *Phylloscopus trochilus*.

It seems quite easy to visit Texel. The Tourist Information Office, V.V.V., Den Berg, Texel, will supply folders and check list and also help to find accomodation. We took a delightful cottage, a self-service banda on a grand scale, and the number of people you fit into it is your own affair, though there is a small government tax per person. Joined by various cousins on half-term leave from their schools, we were a party of nine for much of the time, plus the family dog. The most anxious part was cleaning and tidying the cottage before we left, in the hope that it would pass the scrutiny of its Dutch owners. Prospective visitors should also remember that the Dutch are very punctual people. Some of us wishing to go on a certain bird walk arrived two and a half minutes late at the place of meeting, and the party had already gone. Those accustomed to the habits of the EANHS please note!

Priscilla Allen,
Box 44486,
Nairobi.

- - - - - - - - - - - - - - -

MARKED GREAT WHITE PELICANS

On the weekends of 4-5th May and 1st-2nd June 1974 Dr Emil Urban and his colleagues marked respectively 125 and 75 young Great White Pelicans *Pelecanus onocrotalus* in Ethiopia.

In May they placed a blue streamer on the right leg (BTO ring on left) and in June a black streamer on the left leg (BTO ring on right).

If anyone spots one of these marked birds would they please let Dr Urban know, his address is:

Dr Emil Urban,
Associate Professor,
Biology Department,
Box 1176,
Addis Ababa, Ethiopia.

John Hopcraft,
Baharini Wildlife Sanctuary,
Box 33,
Nakuru, Kenya.

LETTERS TO THE EDITOR

Sir,

Hildegarde's Tomb Bat - Tanzania

I refer to the report by D. Kock *EANHS Bull.* 1974: 70. I consider the source of the specimen collected by Mr J.W. Simons should be Kange Sisal Estate. I would support Dr Kock's plea for further study in this field. In the Tanga area an ecological survey of bat populations in caves in the Jurassic limestone would add to scientific knowledge. From my knowledge of the area I can think of three groups of caves to be examined:

1. caves alongside the Mkulumuzi River near Kiomoni (including those shown to tourists).

2. the elaborate cave systems on Kange Sisal Estate.

3. the caves in the limestone north of Maweni prison.

Some caves are very much populated by bats, but some are free of bats. Also I have been told that bat-populated caves are a health hazard to humans - a colleague of mine had to be treated for a lung complaint after a visit to some of these caves.

J.F. Osborne,
c/o EAAFRO,
Box 30148,
Nairobi.

Sir,

Haplochilichthys antinorii

Ian Parker (*EANHS Bull.* 1974:59-60) asks if this small fish had been seen lately in Lake Naivasha.

For his and members' information I can report that at a very useful and informal symposium held in the Department of Zoology, University of Nairobi, on 17th May 1974, Stephen Malvestuto told us that he has regularly taken this interesting fish in his nets in the Little Lake, in the course of his research on tilapia and the parasitic worm *Contracaecum spiculigerum*.

May I add that this informal symposium was highly successful and informative and a real get-together of persons who were undertaking various projects on Lake Naivasha. Those of us who attended at least obtained some idea of what research projects were being undertaken. The workers include geologists, geographers, limnologists, botanists, zoologists, entomologists, ornithologists and biologists. The Secretary of the Riparian Owners Association also attended.

G.R. Cunningham-van Someren,
Box 24947,
Karen,
Nairobi.

FUNCTIONS.

Monday, 8th July 1974: 5.15 p.m. Lecture Hall, National Museum, Nairobi. Talk on the Geology of the Rift Valley by Mrs Celia Kamau.

Saturday/Sunday 13-14th July 1974: Weekend camp on the banks of the Melawa River (Mr Eric Lucas' farm) Ol'Kalou. Follow Nakuru road to Gilgil, turn right at Gilgil dukas on tarmac to Ol'Kalou and Nyahururu (=Thomsons Falls). After 25 km or so take the D389 road on the right signposted to Wanjohi for about 5 km when it approaches the Melawa River; Falloden Cottage (Mr Lucas' house) can be seen from the road on the left across the river. There may be road diversions by the bridge, if so Mr Lucas will put up signs. Washing water can be taken from the river, Mr Lucas can supply drinking water and a limited amount of fresh milk.

CHANGE OF DATE: Sunday 7th July 1974: All day dudu crawl led by Mr Mike Clifton. Meet at the National Museum, Nairobi at 9 a.m.

Sunday 11th August 1974: Day trip along the Magadi Road, primarily for birds, led by Mrs Vere Bowles. The Magadi Road, winding from the shoulder of the Ngong Hills down into the Rift Valley, passes through a variety of habitats. Please meet at the National Museum, Nairobi at 9 a.m. sharp or the Magadi Road turnoff at 9.20. Please wear walking shoes and bring a picnic lunch.

Saturday 17th August: Marine life trip led by Mrs Fleur Ng'weno. Meet at Coraldene Beach Hotel, Bamburi at 8.30 a.m. and be prepared to wade.

Wednesday morning birdwalks continue to meet every week at 8.45 at the National Museum.

- - - - - - - - - - - - - - - -

NEW MEMBERS - JULY 1974

Full Members:

Mr M. Arcizet, Box 41784, Nairobi.
Miss Victoria Balcomb, Box 44145, Nairobi
Miss Deldores R. Boyer, Box 30261, Nairobi
Mrs Marion Brokhaug, Box 30260, Nairobi
Miss Jill Donisthorpe, Box 45896, Nairobi
Mr Hans Gonget, Box 45767, Nairobi
Mrs Tove Gonget, Box 45767, Nairobi
Mrs K.M. Howard, Box 29004, Kabete, Nairobi
Miss Claire Lofgren, Box 47680, Nairobi
Mr John Miskell, Box 30518, Nairobi
Mrs Margaret Pattison, Box 32, Kikuyu
Mr Norman Thomson, St. Patrick's High School, P.O. Iten, Eldoret
Mr Herbert H. Harper, 8975 No Shore Trail, Forest Lake, Minn. U.S.A.

Junior Members:

I. Clifford, c/o Mr Meadows, Box 30521, Nairobi
Laurence P. Scott, c/o Mr Meadows, Box 30521, Nairobi
A. Fenton, Box 49532, Nairobi
Simon Thompson, Box 30656, Nairobi
Adam Thompson, Box 30656, Nairobi

Institutional Member:

National Outdoor Leadership College, Box 40525, Nairobi

Change of membership status:

Mr J. Leakey becomes a Life Member.

- - - - - - - - - - - - - - - - -

QH
7
E135
.SI

E A N H S

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN AUGUST 1974

CONTENTS

Forest destruction - 102

A June record of the Madagascar Pratincole on the Kenya coast - - 102

Spotted Redshanks in Kenya during March 1974 - - - - - - - - - - - 103

A Bittern at Lake Naivasha - 104

Sisal flowers, nectar and birds - - - - - - - - - - - - - - - - - 104

Ostracised Little Swift and Loyalty of a White-winged widowbird - 107

Dr Kamau on the geology of the Rift Valley - - - - - - - - - - - - 108

Camp in the grounds of Falloden Cottage, Ol Kalou - - - - - - - - 109

Library Notice - 109

For Sale - 110

Society functions - 110

New members - August 1974 - 110

FOREST DESTRUCTION

It may be recalled that at the A.G.M. there was discussion on the subject of the destruction of Kenya's forests; there has been a certain amount of correspondence relating to this matter and the Committee thought that members might like to read two paragraphs from a letter received from Mr O.M. Mburu, Chief Conservator of Forests:

> (1) It has always been the practice when establishing plantations that steep valleys and river beds are not disturbed. The natural vegetation in such areas is always left. This is in accordance with normal agricultural practice.
>
> (2) It has always been our policy to encourage farmers to grow trees for their fuel and also for other local uses. Paper number 1 of 1968. To make this more effective we have as you know established the Rural Afforestation Extension Scheme.

If members notice instances of destruction not in accordance with paragraph one above, they should take all relevant details (including precise location) and report the matter in writing either to the Chief Conservator or to the Chairman of this Society.

Ed.

- - - - - - - - - - - - - -

A JUNE RECORD OF THE MADAGASCAR PRATINCOLE ON THE KENYA COAST

The non-breeding quarters of the Madagascar Pratincole *Glareola ocularis* are still unknown.

Moreau (1966) had records from the African continent for only three months of the year, i.e. August to October, inclusive. With the exceptions of October records from Lake Malawi and the River Zambesi all the observations were from the East African coast and the majority from Kenya. One possibility he considered was that the species is only away from Madagascar for three months of the year, but a number of recent April observations, especially during 1971 and 1972 in Tanzania (Harvey 1973), show that the species leaves Madagascar for a longer period. It appears that birds arrive on the East African coast in April and then move on to unknown off-season quarters. The many August-September records would clearly then relate to a return passage to Madagascar. A June record, which appears to be the first record of this species for the African continent for this month, is therefore considered worthy of publication.

The individual was seen at the mouth of the Sabaki River, near Malindi at about 1200 h on 18th June, 1974. It was seen in flight, and also at rest on a sandy spit where it allowed an approach to about 20 m. The bird had arrived with a party of five Little Terns *Sterna albifrons* and at a time when the incoming tide was flooding over the sand beaches and mud flats; it remained in the estuary for about five minutes before flying inland in a NW direction.

References:

Harvey, W.G. (1973). The Madagascar Pratincole *Glareola ocularis* in Tanzania. *EANHS Bull.* 1973:115-116.
Moreau, R.E. (1966). *The Bird Faunas of Africa and its Islands.* London.

B.S. Meadows,
Box 30521,
Nairobi.

SPOTTED REDSHANKS IN KENYA DURING MARCH 1974

The Spotted Redshank *Tringa erythropus* now winters considerably further south in Africa than formerly and although only recorded for the first time in Kenya in 1953, it is now regarded as a regular winter visitor (see Backhurst, Britton & Mann 1973).

During March 1974 we recorded this species at the following localities:

A Inland	2nd March	Smart's Swamp, Limuru, 7
	3rd March	Lake Naivasha, 1
	19th March	Karatina (freshwater dam), 1
B Coast	6th March	Malindi Bay, 1.

B.M. visited all three inland sites during March 1970 and all the sites during March and April 1973 and saw no Spotted Redshanks. However, there may have been a larger wintering population in East Africa during 1973/74. For example, there were more records in Tsavo East than usual, possibly due to failure of rains elsewhere (Leuthold & Leuthold 1974).

References:

Backhurst, G.C., Britton, P.L. & Mann, C.F. (1973). The less common Palaearctic migrant birds of Kenya and Tanzania. *Jl E. Africa nat. Hist. Soc. Nat. Mus.* 140: 1-38.

Leuthold, W. & Leuthold, B. (1974). Recent observations of migratory shore and water birds in Tsavo East National Park. *EANHS Bull.* 1974: 72-74.

Brian Meadows,
Box 30521,
Nairobi.

John and Dianne Weston,
63 Woodberry Way,
Walton-on-the-Naze,
Essex,
England.

A BITTERN AT LAKE NAIVASHA

On 5th December 1970 I was on the lake wall in front of the Lake Hotel (Naivasha, Kenya) with my wife, when we saw a Bittern *Botaurus stellaris* glide into some reed-like cover on the edge of the lake. Had this been our only observation I might have had a slight doubt when looking in Mackworth-Praed & Grant afterwards and finding how rare this was; fortunately, this was my wife's first Bittern, so I took the trouble to flush it again. It went off at about 15-20 m and I had a first class view with 6X30 binoculars before it dropped into denser cover further along the shore.

I am fairly familiar with Bitterns in the wild having spent considerable time watching Harriers *Circus* spp. in habitats they share. I have also kept Bitterns in captivity and nursed an exhausted injured bird (found walking down a lane near my home) back to full fitness.

I still have above average eyesight and am long past the stage of 'collecting' records of rare birds. At the time I made the observation I had no idea that I was witnessing an unusual event. To me it was a bird as familiar and unmistakable as a Fish Eagle *Haliaeetus vocifer* would be to a Kenya bird watcher.

Derek Wood,
Section II,
Zoological Society of London,
London NW1 4R,
England.

- - - - - - - - - - - - - - -

SISAL FLOWERS, NECTAR AND BIRDS

When the sisal plant *Agave sisalana* (Liliaceae) "poles" the inflorescence produces firstly flowers, later bulbils but seldom fruit capsules. The pole may bear up to 40 lateral branches, each carrying around 40 flowers in clusters. The several hundred flowers last well and they provide a copius supply of greenish nectar over several days, per flower. Furthermore, the flowers on an individual branch do not all open at one time thus the supply is spread over a period of several days. Nectar taken is quickly replaced. The flowers on the lowest branches open first and the process proceeds upwards gradually to the terminal cluster, over a period of several weeks.

The flowers are pale green with a regular perianth. The anthers are protandrous and protrude beyond the perianth while the style gradually elongates beyond the anthers. The flowers are erect on the almost horizontal branches. The nectar is not rich in sugars being only 10.8% sugar in solution (refractometer readings). The sugar types have not yet been analysed. If the flower is not rich in sugar then this deficiency is made up by the volume of nectar that each produces.

Tests at Karen with branches of flowers have been made to record the nectar development. Freshly cut branches were quickly placed in water in a polythene bag and this tightly tied to the stem which was held in a natural horizontal plane on the laboratory bench. All nectar was extracted by means of a fine blunt needle on a syringe and the volume measured, per flower, to the nearest two decimal places of a millilitre.

In one test all nectar was removed and 48 h later the replenished supply was measured from each flower. Quantities per flower varied according to age; for newly opened buds contain but little, whereas older flowers may have as much as 1.20 ml. From 94 flowers on one branch, 46.60 ml of nectar was recovered at 48 h, 33.85 ml after the next 24 h and 24.00 ml after a further 24 h. At 96 h some old flowers yielded but traces of nectar but buds had opened in this time and started to produce. At 120 h a further 11.00 ml had been produced to make a total of 115.45 ml or, for the 90 flowers (less damaged), a yield of 1.28 ml per flower. The maximum yield of a single flower in the test over 120 h was 2.20 ml. This was a fully open flower in which the style had extruded and was of medium length with anthers holding exposed pollen. The style in the bud is around 2 cm long but once the flower opens it lengthens daily to a maximum around 6.9 cm with anthers up to 6 cm.

As a standard, the flowers were graded by eye, as short, medium or long style - i.e. extending from 2.0 cm to 4.0 cm to 6.9 cm. The short style indicating day 3 and commencement of nectar production; medium, where the flow is increasing to day 6 and long, full yield achieved and the flow declining around day 9.

TABLE I

Flower development and nectar production

(mean of a sample of flowers)

Flower		Nectar voume (ml)
Day 1	Mature bud	0
2	Opening, extension of style and anther	0
3	Continued extrusion of style and anther	0
4	Style at 'short' stage, anthers open	0.10
5	Style at short-medium, anthers open	0.25
6	Style medium, pollen free	0.50
7	Style elongating, anthers drying	1.10
8	Style long	0.50
9	Style long and stigma open	0.50
10	Style shrivelling, anthers & perianth dry	0.25 (or less)
11	Shrivelled	sometimes trace
11 days old		Total 3.20 ml

(Nectar was extracted daily from these sample flowers.)

From the example it would appear that the flower lasts around 9 days (developed opening bud to senescence). Nectar is not produced until the style is well exposed (short stage) and the anthers commence to open and expose pollen, this is around day 4. Nectar production then is from day 4 to day 10 - six days. At day 9 the stigma exudes a sticky substance which forms quite a globule of exudate (?nectar) and after 24 h is measurable in microlitres. The refractometer gave a reading of just less than 2% sugar in this mucilaginous substance.

Skead (1967) refers to the agave as "peer as an abundant nectar supplier" and he suggests that each and all flowers contained 0.5 ml at any one time. This is not so from the Karen tests however, the mean for the first day of the Karen test was 0.50 ml per flower and thereafter there was a reduction, the mean showing that the whole sample was really on the wane for nectar production with 19% long styles, beyond their optimum and 44% flowers at optimum, but these, by day 4 had developed to long styles and nectar flow reduced. Skead quotes "0.5 cc per flower with 80 florets per flower head and 40 flower heads (per plant) equals 50 ozs or 8 breakfast cupsfull" (corrected = 56 fluid oz or 1600 ml). It is not clear if Skead meant 0.50 cc per day or over the flowering period, however, by Karen standards, these 3200 flowers should have yielded 3.00 ml/flower or 9600 ml over their productive period and this equals 336 fluid oz or 2.1 gallons of nectar!

THE BIRDS

As the perianth opening is wide (1.5 cm) and the style and anthers flexible, a bird can readily insert its bill into the flower and all flowers are held upright, as open cups, so the nectar is easily available to birds which do not probe as do the sunbirds.

Over the past few months watch has been maintained at intervals at several flowering plants and the following species of birds have been observed sipping nectar:

Wattled Starling	*Creatophora cinerea*
Superb Starling	*Spreo superbus*
Blue-eared Glossy Starling	*Lamprotornis chalybaeus*
Red-winged Starling	*Onycognathus morio*
Dark-capped Bulbul	*Pycnonotus barbatus*
Mousebird	*Colius striatus*
Northern Pied Babbler	*Turdoides hypoleucus*
Kenya Rufous Sparrow	*Passer iagoensis*
Grey-headed Sparrow	*P. griseus*
Holub's Golden Weaver	*Ploceus xanthops*
Reichenow's Weaver	*P. baglafecht*
Bronzy Sunbird	*Nectarinia kilimensis*
Malachite Sunbird	*N. famosa*
Amethyst Sunbird	*N. amethystina*
Scarlet-chested Sunbird	*N. senegalensis*
Golden-winged Sunbird	*N. reichenowi*

Damage to sisal flowers, which consists of beak-like marks at the base of the corolla, have been found and these sometimes as deep holes, right to the base of the style where the nectar is retained. Mousebirds are suspect but they have not actually been seen to peck at the flowers, but to sip nectar.

As Skead (*op. cit.*) has pointed out, many bird species, from crows to tiny warblers visit *Aloe* spp. for nectar in South Africa. I would be pleased and interested to receive any reports of any species taking nectar from sisal or any other flowers. (At the time of writing I have records of, and have examined 120 species of nectiferous flowers visited by sunbirds, and my study continues.)

ACKNOWLEDGEMENT

My thanks to Dr Frank Gill for the loan of the sugar refractometer.

REFERENCE

Skead, C.J. (1967). *The sunbirds of southern Africa also the sugarbirds white-eyes and the Spotted Creeper.* Capetown/Amsterdam.

G.R. Cunningham-van Someren,
Box 24947,
Karen,
Kenya.

OSTRACISED LITTLE SWIFT
AND
LOYALTY OF A WHITE-WINGED WIDOWBIRD

We have a small colony of Little Swifts *Apus affinis* living under the eves of our house at Kiambu. One morning recently an immature swift was seen on the front lawn being attacked most vigorousley by a pair of Grey-headed Sparrows *Passer griseus* who also nest under the eves. I rescued the swift, and found that it had a few small superficial wounds about the head and body. We put it in an airing cupboard to dry out, and to try to resuscitate it to some extent.

A few hours later I released the bird from the front verandah. It took off fairly strongly but had not gone 20 m when the sparrows dived on it like interceptor fighters, and knocked it down to the ground and recommenced their onslaught. Once again it was rescued, put in a cage in the garage, and in the evening, when the swift colony was very active, I released it again well out of view of the sparrows. It flew off but, alas, within minutes, a Striped Swallow *Hirundo abyssinica* was on it, trying to force it down. I last saw them disappearing over a hedge, and was unable to establish what had happened to the poor swift.

Perhaps someone could explain what could have caused such violent persecution of this Little Swift.

A great number of birds on the estate have nested rather late into May, June and July this year, much to the detriment of my mulch grass cutting. However, I had to make a start, and inevitably a White-winged Widowbird's *Euplectes albonotatus* nest was cut down. Some hours later I noticed the female bird taking off from the ground amongst the cut grass. On investigation I found the nest on its side with two eggs in it. I placed the nest carefully in some tall grass about 7 m away. The bird found it again, and has continued to try to hatch her offspring. Once or twice the nest, having little support, has fallen over sideways. Each time I have righted it and the unswerving allegiance of the mother has been rewarded, another week or so should see the offspring airborne. I have had to postpone further mulch cutting 'pro tem.'.

F.J. McCartney,
Fairview Estate,
Box 168,
Kiambu,
Kenya.

- - - - - - - - - - - - - - - -

DR KAMAU ON THE GEOLOGY OF THE RIFT VALLEY

It was a great pity that so many members missed a most enjoyable evening when Dr Celia Kamau lectured on the geology of the Rift Valley on 8th July. A graduate of Cambridge, Dr Kamau is now a lecturer at Kenyatta College and is an exceptionally good speaker.

She started by explaining that the Rift Valley covers a distance of about 5500 km from southern Turkey to the mouth of the Zambezi River. In East Africa, the width varies from about 55 km in the Magadi area to about 320 km in the Lake Rudolf basin. Again, the altitude of the floor is very variable, being at its highest in the Naivasha area (1900 m) and lowest below the waters of Lake Tanganyika where the floor of the Rift Valley is at 650 m *below* sea level.

The formation of the Rift Valley started about 23 million years ago, and ended in its present form about 2 million years ago. The most recent upheaval was in 1928 when the Subukia earthquake occured. It was formed by upward doming and outward stress along parallel lines of weakness in the earth's crust. This caused the land between the lines of weakness to drop while the land on the edge of the faults was thrust upwards. Normally there are several lines of weakness, and these form what is known as 'step scarps'. A good example of this in Kenya is the Kikuyu escarpment where the road descends down several of these steps until it reaches the floor of the Rift.

Amongst many other complex features in the Rift Valley is 'grid faulting'. This occurs notably south of Mt. Suswa where in a distance of 50 km across, one crosses 60 small faults. Dr Kamau went on to explain the different types of volcanoes associated with the Rift Valley. It was interesting to note that Mts. Kenya, Elgon and Kilimanjaro are not directly associated with the Rift Valley. In the Rift floor there are many volcanic cones and mountains such as Longonot and Suswa, and the small cones near Hell's Gate at Naivasha. On the edge of the escarpment older volcanic mountains occur such as the Aberdares and the Ngong Hills. These were formed before the main Rift Valley formation.

To conclude her lecture, Dr Kamau put forward the idea that the area east of the entire length of the Rift Valley is slowly splitting away from the rest of Africa. The Red Sea is slowly widening and it is thought that the sea will next break through on the Danakil depression. This may be the start of the movement which aeons ago started, and has now formed the Atlantic Ocean. It is hoped that Dr Kamau will talk to the Society again on her own research topic, the Rift Valley Lakes.

D.A.

CAMP IN THE GROUNDS OF FALLODEN COTTAGE, OL KALOU

Some 25 people, members and their families, braved the elements last week end that camped successfully on Mr Eric Lucas' farm. It was a pity that it was so wet, as it is a delightful place, and the camp site was on the bank of the Melawa River where many birds could be seen at eye level, and the grass on which we camped was starred with *Craterostigma* and *Hypoxis*. Though the altitude is 2300 m the vegetation suggests dry conditions and it was astonishing how quickly everything, tents and roads, dried as soon as the sun came out on Sunday morning, conditions very different from those at our last high altitude camp, at Naro Moru.

The birds too were a mixture of high and dry. The Ring-necked Dove *Streptopelia capicola* was the common pigeon, and was indeed very numerous, but Red-headed Parrots *Poicephalus gulielmi* flew over and members reported a Black Duck *Anas sparsa* swimming successfully up stream against the current in the swollen and muddy river. Pairs of both Grey and Cardinal Woodpeckers *Mesopicos goertae* and *Dendropicos fuscescens* were seen and Mr Lucas told us that the Grey had nested there. The Moustached Green Tinkerbird *Pogoniulus leucomystax* at eye-level was a treat. There was much song from the Cinnamon Bracken Warbler *Bradypterus cinnamomeus* but few members saw it as it is so skulking. When you see it singing you see that the inside of its mouth is black like that of some cisticolas. Speaking of cisticolas, the ubiquitous *Cisticola hunteri* had some of us puzzled; a forest-edge bird, it finds much of its food in bushes and low trees, and poking about there, it looks like some sort of apalis rather than what it is.

We were interested in the numerous hairy caterpillers, large and small, which were to be found in the grass. Perhaps they accounted for the large number of cuckoos which were heard and seen. Mr Lucas told us that he had seen a Black-headed Oriole *Oriolus larvatus* trying to swallow one of these caterpillers.

There is no doubt that this is an area that members would like to revisit, if Mr Lucas' hospitality can be stretched so far. Of the children's enjoyment there can be no doubt at all. The Society's children provide an endless source of interest even if all else is shrouded in fog. If devoted parents have provided an ample supper, it is a matter of indifference to them if they have to sleep in their clothes, or go to bed without cleaning their teeth. Alas for the sensitivities of age, loading our bags with tubes and bottles and depriving the victim of all sense of humour if tipped out on to the wet floor of the tent because the bed was not placed square on the flat. Perhaps we should ask parents to add to their other cares a sharp eye on litter? We seldom leave any, preferring, like the Guides to "leave nothing but our thanks".

P.M.A.

- - - - - - - - - - - - - - -

LIBRARY NOTICE

Pius Mulwa will be away from 5th August to 3rd September. During this period I shall try to keep the Library open as usual but cannot promise absolute regularity, as I must remind members that I am only supposed to work half-time. Opening on Monday evenings after 5.00 and on Saturday morning will be discontinued until Pius gets back. Anyone who comes and finds the Library shut or wishes to come after the usual hours, please let me know and I will try to make arrangements.

Librarian.

- - - - - - - - - - - - - - -

FOR SALE

Two copies of Roberts' *Birds of South Africa* 1st ed. These copies are in very poor condition and the letterpress has been heavily marked by the former owners, but the plates are clean and good. Removing and rebinding the plates would be a good idea since many species are illustrated which are not figured in Williams' two guides. Prices (in aid of the Society): very shabby copy, 30/-, extremely shabby copy, 20/-. Apply to the Librarian.

- - - - - - - - - - - - - - -

FUNCTIONS

Monday, 5th August 1974: 5.15 p.m. Lecture Hall, National Museum, Nairobi. Talk on Birds and the environment by Robin W. Doughty and Robert Riseborough.
Sunday, 11th August 1974: day trip along the Magadi Road mainly in search of birds, led by Mrs Vere Bowles. Please meet at the National Museum, Nairobi at 9 a.m. sharp or the Magadi Road turnoff at 9.20. Please bring walking shoes and a picnic lunch.
Weekend, 17/18th August 1974: camp at Lake Hannington; please write in to the Secretary if you will be interested in going, details will then be sent.
Saturday, 17th August 1974: marine life trip led by Mrs Fleur Ng'weno. Meet at Coraldene Beach Hotel, Bamburi at 8.30 a.m. and be prepared to wade.
Weekend, 14/15th September: camp at Naivasha, details later.
Monday, 7th October: Lecture by Mr Norman Myers on Threatened Species.

- - - - - - - - - - - - - - -

NEW MEMBERS - AUGUST 1974

Full members:

Miss L. Coulcmbe, Box 30261, Nairobi
Mr A.T. Cutler, Box 44882, Nairobi
Mr E. Easton, Box 129, Mwanza, Tanzania
Mrs B. Gray, Box 11873, Nairobi
Miss A. McKenzie, Box 30544, Nairobi
Mrs A. Prewitt, Box 47543, Nairobi
Mr J. Tucker, Box 8096, Lusaka, Zambia.

Junior members:

Dan Pfeiffer, Box 30261, Nairobi
Vaughan G. Gomez, Box 29053, Nairobi.

- - - - - - - - - - - - - - -

QH
7
E135
SI

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

CONTENTS

Broad-billed Sandpipers and Herring Gulls wintering on the North Kenya Coast 112

Where do all the House Martins go? - 113

White-fronted Bee-eaters apparently taking bread - - - - - - - - - - - - 115

Birdwatching at Mtwapa Creek - 116

What is happening at Lake Naivasha? - 118

Wednesday Morning Bird Walks - 119

Olorgesailie Trip - 121

Review - 122

Letters to the Editor - 123

Request for Information - 123

Geographical Association - 124

Library Notes - 124

Theft - 124

Functions - 125

Some recent periodic literature available in the Library - - - - - - - 126

BROAD - BILLED SANDPIPERS AND HERRING GULLS WINTERING ON THE NORTH KENYA COAST

Backhurst, Britton & Mann (1973) were able to give very few records of either the Broad-billed Sandpiper *Limicola falcinellus* or the Herring Gull *Larus argentatus* from East Africa; but on page 14 they noted that "there is very little bird watching on the East African coast and it is quite likely that the Herring Gull and other rarely recorded birds are more frequent than the sparse records would lead one to believe." A few subsequent records have appeared in this *Bulletin* (1972:81-82, 1972:170-171, 1973:50-51, 1973:52, 1973:74-75, 1973:146-147). As a resident of Mombasa since May 1973 I have collected data which suggest that both species winter regularly on the north Kenya coast.

Between 5th August 1973 and 12th April 1974 I made twenty visits to the mouth of the Sabaki River near Malindi at all stages of the tide, and saw Broad-billed Sandpipers on all but five occasions. The largest counts were 33 on 22nd December and 38 on 2nd March. The first count to exceed 10 was on 13th December (26 birds) so that the main arrival may have been as late as December. Dr P. Duffus, C.F. Mann, R. McVickers and J. Squires each saw the birds once, and my wife Hazel saw them several times. They are easily overlooked, especially at low tide, and I have little doubt that a flock of 40 or more spent much of the northern winter at this site.

The mudflats near the mouth of the Sabaki River evidently provide suitable winter habitat for the Broad-billed Sandpiper. Though it has never been recorded in Somalia it probably winters annually at suitable coastal sites, with the Sabaki River as its normal southern limit. It has never been reported from nearby Mida Creek nor from elsewhere on the Kenya coast, perhaps due to a lack of suitable estuarine mudflats. As is well known, the Crab Plover *Dromas ardeola* is common on the sand flats of Mida Creek, where it presumably finds ideal feeding opportunities, yet I have seen it only once at the Sabaki River. The reverse may apply for the Broad-billed Sandpiper, which may prove to winter regularly in coastal Kenya at only this one site.

Harvey (1973) gave records of up to ten Herring Gulls at Dar es Salaam, Tanzania between November and March, but the bird seen by A. Gille at Malindi in December, reported by Britton & Brown (1974), is the only published Kenya record. Between 3rd November 1973 and 30th March 1974 I recorded up to five birds together on 21 dates at three localities (Malindi Fish Market, Sabaki River mouth, Nyali Beach), and others were seen in January at Malindi (C.F. Mann) and Kikambala (Dr P. Duffus, 5 together). I personally recognised at least nine different adults or subadults and two immatures. Two adults were photographed at Malindi Fish Market by my wife Hazel who saw several of the other birds too.

There is considerable geographical variation in the Herring Gull, mainly in the colour of the mantle and legs. The pale grey, pink-legged nominate form which breeds in Britain and W. Europe is unlikely to occur in our area, though one of Harvey's birds resembled this form. The other Dar es Salaam birds were much darker with yellow legs and were most likely *heuglini* (breeding in N.W. Russia) as were, apparently five of my adults or subadults in Kenya. In my experience these are typically as illustrated in Mackworth-Praed & Grant Vol.1, plate 26, though the head may be virtually unmarked. They are larger than Lesser Black-backed Gulls *L. fuscus.* It is noteworthy that *heuglini* is the only form listed for eastern Africa by White (1965).

Two adults, at Nyali on 6th February and at the Sabaki River mouth on 2nd March, were a little paler than the *heuglini* type birds, with pink or grey-pink legs. And two adults at Malindi between 19th January and 16th March were, in mantle colouration, more or less as I remember nominate birds, or a shade darker, but with yellowish not pink legs. It is probably not possible to ascertain the area of origin of the four birds but I would appreciate any suggestions.

I think it unlikely that the Herring Gull has been overlooked in the past. It is more plausible that its status has changed, as has that of many gull species here and elsewhere in recent decades.

Peter L. Britton,
Box 90163, Mombasa.

REFERENCES:

Backhurst, G.C., Britton, P.L. & Mann, C.F. (1973) The less common Palaearctic migrant birds of Kenya and Tanzania. *Jl E. Afr. nat. Hist. Soc. & Nat. Mus.* 140:1-38.
Britton, P.L. & Brown, L.H. (1974) The status and breeding behaviour of East African Lari. *Ostrich* 45:63-82.
Harvey, W.G. (1973) More unusual larids in Tanzania. *EANHS Bull.* 1973:50-51, 74-75.
White, C.M.N. (1965) A Revised Checklist of African Non-Passerine Birds. Lusaka: Govt. Printer.

- - - - - - - - - - - - -

WHERE DO ALL THE HOUSE MARTINS GO ?

House Martins *Delichon urbica* are seen in Kenya occasionally in small numbers (1 - 10), but observations of large numbers (50 or more) appear to be rare, although it is thought that tens of millions actually winter in Africa. This note details one such occurence and discusses the anomaly.

While investigating the whereabouts of a hirundine roost at Lake Nakuru on the afternoon of 8th January 1974, we came across large numbers of hirundines flying low over grassland between the lake and Lion Hill. European Swallows *Hirundo rustica* were the most numerous (5000 estimated) but there were also about five hundred House Martins. Whereas the Swallows were feeding largely at 1 - 8m off the ground, the House Martins were at a height of at least 10m and were seen to be common up to 200m above ground level near the cliffs. A few flew as low as 2m and we netted and ringed 15 of them on 8th/9th January.

The weather at the time was overcast with a little rain and a light easterly wind, the latter being insignificant in the lee of Lion Hill. Weather of this type, with or without rain, seems to cause a concentration of insects (chiefly Chironomids at Nakuru) near ground level in the late afternoon or early morning. Almost always this results in numerous European Swallows, European Sand Martins *Riparia riparia* and African Sand Martins *R. paludicola* descending to feed close to ground level. What is unusual about this case is that, in approximately 50 days observation at Lake Nakuru in five years, we have never before seen such a concentration of House Martins, although we have seen and caught one or two birds on a few occasions.

From published notes and personal records, it would appear that the House Martin may be seen in small numbers fairly frequently in Kenya in various habitats and at a range of altitudes, but probably most frequently at altitudes of 2000m and over. Moreau (1972) summarizes the records of recent years and they are almost as sparse as those given by earlier authors such as Chapin (1953) for the Congo. Observations of large numbers appear to be very few and far between (in distance and time), perhaps the greatest concentration being of 2000 - 3000 birds in one Mt.Elgon valley seen by Rolfe & Pearson (1973) and their subsequent estimation of 50000 around Mt. Elgon (Uganda and Kenya). This paucity of records is very peculiar in view of the fact that Moreau (1972) estimates that something like 90 million birds leave the Palaearctic region for Africa; perhaps 50 million survive to overwinter in Africa. It seems fairly certain that they fly and feed normally at altitudes beyond 'binocular sight' as do the larger swifts - indeed, on 8th January some large swifts had descended to 100 - 200m apparently to feed with the House Martins as, presumably, they had not found sufficient food at higher levels due to weather conditions.

Possibly, the House Martins even roost on the wing as the larger swifts have been proved to do - however unlikely it may seem for the House Martin; this might explain the apparent lack of roosts, except for one instance recorded by Sassi & Zimmer (1941) on the southeastern Tanzania coast. However, assuming that they roost terrestrially, that the roosts are similar in size to those of European Swallows and that they are not just passage migrants to southern Africa (our January record appears to refute this), one can estimate the likely number of roosts in any area, as follows: from the relative numbers of Swallows and House Martins that Moreau (1972) calculated should enter Africa (220 to 90 million respectively), we can estimate that there should be at least two House Martin roosts in the western half of Kenya as we know of five Swallow roosts in the same area (Nakuru, Hannington, Kisumu, Yala Swamp and Kitale) and there are probably more. However, finding roosts is another matter, should they exist. Sassi & Zimmer (1941) described how the House Martins dropped into the roost at dusk; from our experience with the Nakuru hirundine roost in March 1974, it would be almost impossible to detect unless one were *within 200m* of the roost at the critical 15 minutes at dusk as the hirundines were 'dropping in' from some altitude with very little noise. It was only in January and February that the roost was more obvious as the birds were collecting and feeding over the lake and then 'streaming' into the roost at 1 - 2m off the ground just as the light was failing for effective vision.

Thus, we do not know if House Martins roost terrestrially or on the wing and, if terrestrially, we know of no roost sites. From this and from the fact that the birds rarely come close to the ground, only 48 have been caught and ringed up to the present in East Africa (G.C. Backhurst pers. comm.) but there has been one recovery to the U.S.S.R. (Backhurst 1971). We should be very grateful to hear of any roosts so that we could ring House Martins as their recovery potential must be good, having such a close relationship to Man in their breeding quarters.

John and Lyn Harper,
Box 547,
Kericho, Kenya.

REFERENCES:

Backhurst, G.C. (1971) East African Bird Ringing Report 1969-1970. *Jl E. Afr. nat. Hist. Soc. & Nat. Mus.* 123:1-14.

Chapin, J.P. (1953) The Birds of the Belgian Congo (Part 3). *Bull. Am. Mus. nat. Hist.* 75A.

Moreau, R.E. (1972, *The Palaearctic - African Bird Migration Systems.* Acedemic Press, London.

Rolfe, J.G. & Pearson, D.J. (1973) Some recent records of Palaearctic Migrants from Eastern Uganda. *EANHS Bull.* 1973:62.

Sassi, M. & Zimmer, F. (1941) Beitrage zur Kenntnis der Vogelwelt des Songea-Distriktes. *Annls. naturh. Mus. Wien* 51:236-346.

- - - - - - - - - - - - - - -

WHITE - FRONTED BEE - EATER APPARENTLY TAKING BREAD

In the early afternoon of 23rd June 1974 at the parking place on the track going up Mt. Longonot I saw White-fronted Bee-eaters *Merops bullockoides* landing on the ground where they shuffled about. Several of the birds were holding butterflies in their bills while one bird picked up a piece of bread, tossing it up and 'nibbling' the crumbs as if eating them. In the closely related Red-throated Bee-eater *M. bulocki*, Fry (1972) has recorded various items (e.g., dead leaves and bits of grit) being treated in the same way as insect food, possibly accounting for the presence of small stones, fragments of cow teeth, etc. that he found in adult and nestling gizzards where they probably function as gastroliths. When disturbed by people returning from the crater the bee-eaters flew off in the direction of a nearby *korongo* where some thirty pairs were nesting.

J.F. Reynolds,
Box 40584,
Nairobi.

REFERENCE:

Fry, C.H. (1972) The Biology of African Bee-eaters. *Living Bird* 11:75-112

- - - - - - - - - - - - - - -

BIRDWATCHING AT MTWAPA CREEK

I have just returned to Kericho after spending two weeks at 'Brooke', the Brooke Bond house situated on the Mombasa side of Mtwapa Creek, and knowing that a number of people up-country are interested in the birdwatching to be found in the highlands, I would like to draw their attention to the excellent birdwatching to be found at Mtwapa.

I have only stayed at 'Brook" during April, so can only refer to the birds likely to be found at that time of year. Perhaps the most spectacular of the birds commonly seen at this time of year are the European Golden Orioles *Oriolus oriolus* which can be seen at any time of the day, diving from one tree to another in a small party of four birds. If one is able to rise before about 8.30 a.m. (!), there is a very good chance of seeing up to a dozen Silver Cheeked Hornbills *Bycanistes brevis*, either flying across the creek, or flapping and squawking loudly in one of the larger trees at the bottom of the garden. I noted with interest their mode of flight. A single hornbill would flap across from one side of the creek to the other. When he had reached his destination, the main party of hornbills would follow. And when they had completed their flight a final lone bird would complete the operation by joining the rest of the party.

One cannot fail to see the chattering flocks of starlings in the garden at this time of year. Two species were in evidence: the shyer, more skulking Black-breasted Glossy Starlings *Lamprocolius corruscus*, and the brightly coloured Violet-backed Starlings *Cinnyricinclus leucogaster* which were in numbers of up to fifty at times as they flew excitedly from one side of the garden to the other.

As the heat of the day approached, the silence would often be broken by a playful clicking sound. This was the friendly Spotted Flycatcher *Muscicapa striata*, usually in evidence throughout the day, until his departure for Europe.

Lunchtime viewing could always be improved by leaving the tap in the front garden dripping. Hordes of Bronze Mannikins *Lonchura cucullatus* augmented by smaller numbers of Red-billed Fire Finches *Lagonosticta senegala*, Rufous-backed Mannikins *Lonchura bicolor* and Red-cheeked Cordon Bleus *Estrilda bengala*, could always be depended upon to enjoy the spray. These flocks of tiny seed-eating birds were often joined by a friendly pair of Yellow-fronted Canaries *Serinus mozambicus* which could otherwise be found in the tree in front of the verandah.

If all these relatively new birds prove too much for 'tea people', then they need look no further than the front lawn to see familiar birds such as the pairs of African Pied Wagtails *Motacilla alba*, while a walk around the perimeter of the garden will often end in the sighting of Yellow-vented Bulbuls *Pycnonotus barbatus*, abundant in the highlands, or the speckled Mousebirds *Colius striatus*, despised in Kericho on account of their destruction of vegetable crops. The more enterprising birdwatchers may be flummoxed by two particular sounds. One is a continuous "pir-oo-wee" that may be heard throughout the day. If the bird is located, and this is not difficult, as when calling the bird usually finds a fairly conspicuous perch, it will be found to be the Zanzibar Sombre Greenbul *Andropadus importunus*, as difficult to identify as some of our forest greenbuls.

The second sound may be heard from dusk to dawn. This is described by Leslie Brown, in his book 'African Birds of Prey' as a "short melodius, somewhat ventriloquial trill, 'trr' ", and is uttered by the African Scops Owl *Otus scops senegalensis*. I failed to see the bird myself, the only time it was seen was by my father, who saw it in flight as I rushed to find a torch.

A short walk along the beach below the house, towards the opening of the creek, always proves to be worthwhile. I made this enjoyable trek several times during our stay, and encountered some interesting species of birds. Common Sandpipers *Tringa hypoleucos*, Ringed Plovers *Charadrius hiaticula*, Grey Plovers *Pluvialis squatarola* and a noisy Pied Kingfisher *Ceryle rudis*, are usually the first birds to be seen, while in the mangroves one may encounter chattering Golden Palm Weavers *Ploceus bojeri*. The best birding area is up near the mouth of the creek, where a flat area of sand and coral is excellent for waders when the tide is low enough. As well as the pre-mentioned waders, a Greenshank *Tringa nebularia* or two will usually be in evidence, while the trilling of the Whimbrels *Numenius phaeopus* will always be heard. I saw one particular Whimbrel, a wounded bird with a missing foot, on every visit I made to this area. Curlew Sandpipers *Calidris ferruginea* are fairly common in this area, some nearing full summer plumage, and if the tide is low enough to enable one to leave the creek and walk to Shanzu Beach, Sanderlings *Calidris alba* and Turnstone *Arenara interpres* in full summer plumage may be seen.

In the creek itself, Sooty Gulls *Larus hemprichii* and Lesser Crested Terns *Sterna bengalensis* were usually in evidence, and for several days I saw Little Terns *S. albifrons*, a bird I had only encountered on the South Coast of England, at Pagham Harbour previously. The Little Terns were well worth watching as they fed during the day. They would dive like Gannets *Sula basana* and enter the water with a tremendous splash, emerging a second later with their prize.

The bird that gave me the most trouble during the two weeks I spent at Mtwapa was a small dark heron, usually to be encountered either at the end of a line of fishermens stakes, or standing stock still on the edge of coral pools. I identified the bird as a Greenbacked Heron *Butorides striatus*, but am still not 100% certain, so if anyone else has identified the small herons in Mtwapa Creek, I would be interested to hear of their opinions. I made these brief notes on the bird - Small heron - dark top to the head and crest, white mark on shoulder, three ivory horizontal marks on side of face, two vertical ivory lines on throat. Dark wings in flight, dark back, yellow legs dangling in flight Bill - upper mandible black, lower yellow. *

Nigel Hartley,
Box 20,
Kericho, Kenya.

---

*Peter Britton who lives at Mtwapa Creek writes: "The herons are indeed Green-backed Herons which are always to be seen exploiting the fish traps in the creek." Ed.

WHAT IS HAPPENING AT LAKE NAIVASHA ?

I spent three days in August this year on Crescent Island, Lake Naivasha (Kenya) with Jean Hayes, and we were both shocked by the changes which have come about there in the last few months. We spent a great deal of time looking for water birds all round the perimeter of the Island and saw one African Jacana *Actophilornis africana*, a small number of Red-knobbed Coots *Fulica cristata*, a few Moorhen *Gallinula chloropus* and a few Little Grebes *Podiceps ruficollis* in *three days*. WHY ?

It would appear that the answer lies with *Myocastor coypus*, the Coypu or Nutria which accidently arrived at Lake Naivasha in 1969 or 1970. It seems that this South American rodent was introduced into Kenya, probably in the early 1950s, for its fur, known commercially as Nutria. For some reason, this scheme was discontinued and the animal was either released or escaped. Ever since then they have made their way down rivers and in and out of dams and lakes, and seem to cause destruction wherever they spend any amount of time.

To date, I have only been able to find one short article on the Coypu in Kenya, this by Leslie Brown in *Safari Magazine*, Vol.3 No.3 June/July 1972. The information I have been able to obtain comes from ten papers on the Coypu in America. These were presented to the Society's Library by Dr Alexander Sprunt of the National Audubon Society of America, and are available for members to read.

Myocastor coypus is a large, semi-aquatic rodent looking not unlike an overgrown guinea pig and weighs an average of 3.2kg. Its body is about 45cm long with a 30cm tail. The Coypu is most active at night and is a vegetarian, eating between 1 - 1.5kg a night. The species is prolific, being sexually mature at 5 - 6 months old and has a gestation period of 100 - 130 days. The female can produce two litters a year, each litter being of 2 - 13 young, with an average of five.

From the observations I have made at Lake Naivasha, it seems that the favourite food of the Coypu is the Water Lily *Nymphaea capensis*. Jean Hayes and I found two small patches of the lily remaining round Crescent Island. Now that the Water Lily has gone, temporarily we hope, a species of sedge (*Cyperus rotundis* I think) has had a population explosion and is now covering vast areas round the causeway to the island. However, it would not be fair to put all the blame for this on the Coypu without facts, and the prevalence of this sedge may be partly due to the fluctuating lake levels over recent years. Another factor to consider is that the water lily pads were a help in preventing water evaporation from the lake, and now that the sedge has taken over, these will, I imagine, take far more water from the lake than the water lilies did. I hear that nearly all of the water lilies growing on Lake Ol Bolossat has now been eaten by the Coypu.

The fact remains that Lake Naivasha is now almost devoid of its spectacular water bird life. It will be interesting to see what will happen when the Palaearctic migrants arrive, as most of the mudbanks, in the island area at any rate, have been covered by the sedge.

As the Society is holding a study camp at Lake Naivasha in September, it is hoped that some constructive work will be possible on the Coypu, and maybe also a look at the Louisianna Red Swamp Crayfish which was introduced into the lake at about the same time as the Coypu.

I know that work is being done on the Crayfish in the Lake, but is anyone working on the Coypu problem? One would sincerely hope so, and I am sure that the Society members would be interested to hear about this and the results it is producing.

Dennie Angwin,
Box 72833, Nairobi.

WEDNESDAY MORNING BIRD WALKS

Every Wednesday morning there is a Nairobi bird walk led by Mrs Fleur Ng'weno. I joined the group in January 1973 and decided that it would be interesting to keep records of the birds we see each week. The venue is chosen at random, and this together with the relatively short period of time during which have been kept, means that the results are not of statistical significance. However, readers may be interested in some of the data collected.

We visit various places in the Nairobi area e.g. Nairobi Game Park, City Park, the Arboretum, Karura Forest, Rowallen Boy Scouts Camp and various private gardens. Occasionally we have an all day trip to Lake Naivasha. So far we have recorded 314 different species of which 55 have been recorded only at Naivasha leaving 259 for the Nairobi area.

From these records I have listed below the twenty birds most commonly seen on these walks. I have excluded records based only on hearing the bird, because whilst these are true records they would weight the list in favour of birds whose call we can recognise (which is not very many!). The list is in descending order of frequency of observation.

Dark-capped Bulbul *Pycnonotus barbatus*
Fiscal Shrike *Lanius collaris*
Variable Sunbird *Nectarinia venusta*
Reichenow's Weaver *Ploceus baglafecht*
Black Kite *Milvus migrans*
Speckled Mousebird *Colius striatus*
White-eyed Slatey Flycatcher *Melaenornis chocalatina*
Paradise Flycatcher *Terpsiphone viridis*
Streaky Seedeater *Serinus striolatus*
Black-breasted Apalis *Apalis flavida*
Collared Sunbird *Anthreptes collaris*
Olive Thrush *Turdus abyssinicus*
Chin Spot Flycatcher *Batis molitor*
Bronze Mannikin *Lonchura cucullata*
Bronze Sunbird *Nectarinia kilimensis*
Red-eyed Dove *Streptopelia semitorquata*
Pied Crow *Corvus albus*
Augur Buzzard *Buteo rufofuscus*
White-bellied Tit *Parus albiventris*
Amethyst Sunbird *Nectarinia amethystina*

Some birds are only seen at particular times of the year. Some of these are European migrants which are here only during the European winter, e.g. European Rock Thrush *Monticola saxatilis*, Common Sandpiper *Tringa hypoleucos*, European Kestrel *Falco tinnunculus* etc. Others are East African birds which come to this area only at a particular season e.g. Malachite Sunbird *Nectarinia famosa* and Golden-winged Sunbird *N. reichenowi* which come when the Leonotis is in bloom during the long rains. The Violet-backed Starling *Cinnyricinclus leucogaster* has only been recorded from the end of April to the middle of September.

Some birds are only recorded by us at a particular season because they only have their spectacular breeding dress at that season. For the rest of the time they are little streaky brown birds which we cannot easily identify e.g. Red-collared Widow Bird *Euplectes ardens* and Pin-tail Whydah *Vidua macroura*.

During the last eighteen months a few interesting records have occured which I will list below. Perhaps readers may like to add to them or comment on them.

1. The Bronze-naped Pigeon *Columba delegorguei* (both sexes) was recorded in the Arboretum on 10th July 1974. This species is rarely seen in the Nairobi area.

2. Sanderling *Callidris alba* were recorded on the pond near the East Entrance of Nairobi Game Park on 12th September 1973. These are normally coastal birds.

3. The Green-headed Sunbird *Nectarinia verticalis* was recorded in a garden at Kileleshwa, Nairobi, on 26th June 1973. This bird is rarely seen in the Nairobi area.

4. A Pied Wheatear *Oenanthe pleschanka* was recorded in the Arboretum on 20th February 1974. This is an unusual habitat for this bird, it is a bird of the grassy plains. It is interesting to note that this record was during the worst part of the drought.

5. A Thick-billed Seedeater *Serinus burtoni* was recorded in a garden in the Langata area on 19th June 1974. This bird is rarely seen in the Nairobi area, away from forests.

6. Sharpe's Starlings *Cinnyricinclus sharpii* were recorded at Rowallen Boy Scouts' Camp on 30th May 1973, another unusual bird for the Nairobi area.

7. Two Spotted Thicknees *Burhinus capensis* were recorded in Nairobi Game Park on 3rd July 1974. Whilst these are normal residents of the Game Park, this was a lucky sighting since they are nocturnal birds.

8. Golden-backed Weavers *Ploceus jacksoni* were recorded on a pool on Kuwinda Estate, Langata on 15th May 1974 and 22nd May 1974. This is an unusual area for these birds. They are common on the shores of Lake Victoria and other lake shores, swamps and large rivers. These birds may have escaped from an aviary and information on this point would be welcomed. They are, in fact, nesting in the rushes of this pool and it will be interesting to see whether they breed sucessfully and establish a permanent colony in the area.

9. A greeshank *Tringa nebularia* was recorded in Nairobi Game Park on 16th May 1974. This is a European migrant which has normally returned to Europe before this date.

10. White-starred Bush Robins were recorded feeding young on 26th September and 24th October 1973 in a garden in Karen. This record shows that they breed in this area.

If this article has stirred the interest of anyone interested in birds, do join us any Wednesday morning at 8.45 a.m. outside the Museum. Everyone is welcome including absolute beginners.

Vere V. Bowles,
c/o Box 44486,
Nairobi.

OLORGESAILIE TRIP

On Sunday 11th August 1974, forty birdwatchers met at the Magadi Road turn-off to begin an all day ornithological trip to Olorgesailie. At 9.30 a.m., the sixteen vehicles took off with Vere Bowles in the lead. Hardly had we started when we stopped to observe a Crowned Hawk Eagle *Stephanoaetus coronatus* sitting majestically at its nest near the Langata Gate of the Nairobi National Park.

We had agreed to proceed directly to Olorgesailie, but at one point an infant giraffe brought the four rear cars to a brief halt; and several miles before the turn-off to Olorgesailie, the same four stopped at a small pool where the avian activity was irrestible: there we watched a mixed flock quenching their thirst: Red-billed Quelea *Quelea quelea*, Grey-headed Social Weaver *Pseudonigrita arnaudi*, Cut-throat *Amadina fasciata*, Namaqua Dove *Oena capensis*, Chestnut Sparrow *Passer eminibey*, White-bellied Canary *Serinus dorsostriatus* and Blue-capped Cordon-bleu *Estrilda cyanocephala*. A lone Red and Yellow Barbet *Trachyphonus erythrocephalus* perched motionless in a tree above all the to-ing and fro-ing.

Only the people in the advance cars witnessed two Augur Buzzards *Buteo rufofuscus* mobbing a Tawny Eagle *Aquila rapax*, but when en route lists were compared, we learned that there were numerous 'duplicates'.

After a quick trip around the pre-history sites, where a pair of African Rock Martins *Hirundo fuligula* was discovered at a nest, the hot and thirsty naturalists lunched in the comparitively cool shade of the Museum Banda. Then a few stalwarts headed for Lake Magadi (by car) and the others walked along the dry and rocky riverbed. By now most sensible birds were resting in the leafy trees that lined the riverbed, but several species, including the Grey Wren Warbler *Camaroptera simplex*, were located by birdsong specialists.

On the return journey to Nairobi, we made a second cool and welcome pause at the roadside pool where the mixed flock was still busy. Some other high-spots of the day were Yellow-spotted Petronia *Petronia xanthocollis*, Slate-coloured Boubou *Laniarius funebris*, White-bellied Go-away-bird *Corythaixoides leucogaster*, Teita Fiscal *Lanius dorsalis* and the Brown-throated Barbet *Tricholaema melanocephalum*.

Though the consensus of opinion was that Olorgesailie at high noon is not a birdwatcher's paradise, we thoroughly enjoyed the outing and the fifty four species we had observed. We also agreed that an overnight stay and a dawn start would be the pleasantest and most rewarding arrangement.

Next time!

J. W-C.

- - - - - - - - - - - - - -

REVIEW

THE IDENTIFICATION OF GRASSES IN EAST AFRICA - FLORA OF TROPICAL EAST AFRICA Gramineae (Part 2) by W.D. Clayton, S.M. Phillips & S.A. Renvoize pp.273. fullpage illustrations 63. map 1, price in UK £2.75

Published in April 1974 by the Crown Agents, London and available from Govt. Printer, Box 30128, Nairobi; Govt. Publications Agency, Box 1801 Dar es Salaam; Govt. Printer, Box 33, Entebbe; Govt. Bookshop, Box 569, London SE1 9NH.

Of the three works which deal with the grasses of Kenya, Tanzania and Uganda, by A.W. Bogdan (1958), D.M. Napper (1965) and Harker & Napper (1960) only the last 'An illustrated guide to the grasses of Uganda' is still in print (Govt. Printer, Box 331, Entebbe, E.A. Sh.24/- including postage). Dr Agnew's 'Upland Kenya Wild Flowers' due to appear next month, which will be invaluable for all other herbaceous groups will not include grasses and sedges.

These facts make the appearance of a second part of F.T.E.A. Gramineae, which like all parts of this flora is based on a thorough revision of the plants concerned and is illustrated by admirable full page line drawings, especially welcome.

F.T.E.A. Gramineae Part I which came out in 1970 dealt with 144 species in 51 genera arranged in some twenty tribes. This part was of little value to workers in most of E. Africa because most of the species concerned belong to temperate groups found only on high mountains. For instance, of 76 grass species known to occur in Nairobi National Park only 6 are dealt with in Part I, while 32 are among the 280 species in Part 2, leaving 38 to be disposed of in Part 3. The two largest genera in Part 2 are *Eragrostis* with 71 species and *Sporobolus* with 44 species, whilst the largest in Part I was *Aristida* with 24 species. *Panicum*, which will appear in Part 3, has 55 species in Tanzania alone and may well prove to be the largest genus of all when the whole family has been dealt with.

Grasses, whether directly as cereals or as the food of livestack are the chief providers of food for Man. As the main protection against soil erosion they ward off the principal threat to Man's environment in Africa. It is well that they should be studied and since they cannot be studied unless they are identified, East Africans owe a debt to Dr Clayton and his colleagues and those who make his work possible.

J.B.G.

LETTERS TO THE EDITOR

Sir,

Swift attacked by Sparrows

I was interested in Mr MsCartney's account in the last *Bulletin* of a grounded swift being attacked by sparrows, as I witnessed a similar incident outside our Medical Library at Haile Sellassie I University at Addis Ababa when I was working there. The attackers were Swainson's Sparrows *Passer swainsonii*, the Ethiopian equivalent of *Passer griseus*. The victim was a dark brown Swift with a pale throat that I put down tentatively as a Nyanza Swift *Apus niansae*, or possibly (as it was October) the Common Swift *Apus apus*. It was very weak and died before the next morning.

P.M. Allen,
Box 44486,
Nairobi.

Sir,

I was interested to read Mr Wood's report on sighting a Bittern *Botaurus stellaris* at Naivasha. About twelve years ago I saw what I took to be a Bittern at the edge of the papyrus in one of the big Amboseli swamps. I had never seen one before but my companion had seen them in Europe and was also familiar with the American Bittern *Botaurus lentiginosus*. The bird adopted the characteristic stance while we were watching it. We were able to judge the size by comparison with other common birds nearby, so confusion with an immature Night Heron *Nycticorax nycticorax* was unlikely.

R.A. Lowis,
Box 49538,
Nairobi.

- - - - - - - - - - - - - - -

REQUEST FOR INFORMATION

I am compiling a report on the East African Crowned Crane *Balearica pavonina* for the World Working Group on Cranes. Would members who see anything of interest please report it to me. I want breeding data especially; clutch size and times of breeding etc. Any information regarding movement, any large numbers seen. When you send in the information, please do be really exact as to locality (a place name if possible) then I can pin point it on my map

Jennifer Horne,
Box 24622,
Karen, Nairobi.

- - - - - - - - - - - - - - -

FOUND

Left in Mrs Bowles' car after the bird walk on August 7th, child's black embroidered pull-over. Can be recovered from the Libray.

GEOGRAPHICAL ASSOCIATION

The Geographical Association has been revived and a full programme of lectures and field trips is planned. The subscription is Sh.20/- for members living within 32km of Nairobi and Sh.12/50 for the rest. Student members Sh.5/-. The Secretary is Mr G.S.O. Ongweny, Dept. of Geography, Nairobi University. For furhter information and forms of application for membership can be had from the Librarian, National Museum, Box 40658, Nairobi.

- - - - - - - - - - - - - - -

LIBRARY NOTES

With reference to the present anxiety about forests in Kenya, there is an encouraging article "Forests - The Forester's view" in the R.S.P.B. magazine *Birds* for May - June 1974 (Vol.5, p.18) by the Senior Officer of the Forestry Commission in Wales. Though written about the British Isles, much of it is no doubt applicable (or could be) here in Kenya. "People simply do not see", he write, "what a change will come in the next decades. In areas that were planted earlier we find objection dies away".

The late K.D. Smith in a paper on "the Utilization of Gum trees by birds" in the last issue of *Ibis* (Vol.116, p.155)quotes a correspondent as predicting that "the exotic plantations (and all disturbed habitats) contain the Species which will survive the change when men completely remove the original habitat". "If this is true" wrote Smith, "then the exotic plantations will in future deserve more attention".

P.M.A. Librarian.

In September we return to the normal Library opening hours:
Monday - 8.30 - 1.0 & 2.0 - 6.0
Tuesday to Friday - 8.30 - 1.0 & 2.0 - 5.0
Saturday - 9.0 - 12.30

- - - - - - - - - - - - - - -

THEFT

A number of coloured and black and white plates have been ***cut out*** of the new edition of *Roberts' Birds of South Africa* - a red star book (reference only) from the Society - National Museum Library. Other books, journals and bound journals have also been stolen. Apart from the fact that stealing is wrong and a criminal offence, stealing books or parts thereof from a library is especially wrong since the theft affects so many people.

Steps are being taken to increase security arrangements in the Library: inevitably these will sometimes cause hardship and annoyance to honest Library users, but this cannot be helped and no apology is offered since the welfare of the books is of paramcount importance.

Ed.

FUNCTIONS

Monday 9th September 1974: 5.15 p.m. Lecture Hall, National Museum, Nairobi. Talk and slide show by Mr T. Huels on the Superb Starling. Mr Huels is a worker from Arizona who is studying Superb Starlings. These are common birds but so far no detailed study seems to have been made of their breeding habits and social structure. Mr Huels has now reached a point where he is prepared to tell us about some of his observations and show us some of his slides.

Saturday/Sunday 14th/15th September 1974: Weekend Study Camp at Naivasha - led by Miss D. Angwin. Details will be sent to members who send in the camping slips to the Secretary.

Monday 14th October 1974: 5.15 p.m. Lecture Hall, National Museum, Nairobi. Talk and Slide Show by Mr John Karmali, Chairman, E.A.N.H.S. Further details will be announced in the October Bulletin.

Saturday/Sunday 8th/10 November 1974: Weekend at Baringo Lodge. Sh.100/- per person per night. 24 people only (in 12 doubles).

- - - - - - - - - - - - - - -

NEW MEMBERS - SEPTEMBER 1974

Full members:

Mr J.Allaway, Box 14893, Nairobi.
Mrs A.G. Anderson, Box 30101, Nairobi.
Mr P. Burliegh, 2561 Treasure Ave., Santa Barbara, California, U.S.A.
Mrs I.P Colquhoun, Box 20139, Nairobi.
Mrs D.M. Dunbar, Box 30462, Nairobi.
Rev. M.S. Edwards, St. Paul's United Theological College, P.O. Limuru.
Dr B.A. Jenny, Box 30228, Nairobi.
Miss M. King, c/o Kenya High School, Nairobi.
Mr O. Schungel, Box 30560, Austrian Embassy, Nairobi.
Mr Jose P.L. Tello, Caixa Postal 1378, Lourenco Marques.
Mr D. Vogt, Box 45502, Nairobi.
Mr R. Wingfield, Box 35060, Dar es Salaam, Tanzania.

Junior members:

Carol Anderson, Box 30101, Nairobi.
Jane Anderson, Box 30101, Nairobi.
Joyce A. Carlson, Box 30197, Nairobi.
John Yaninek, Box 30197, Nairobi.

RECRUITING NEW MEMBERS

Enclosed with this issue is a copy of the Society's publicity folder; please pass this on to a friend who may be interested in joining, or display it on a notice board. With ever rising costs it is important that we increase our membership and anything that you, our members, can do in this direction will be most valuable. Extra copies of the folder are obtainable from the Secretary or from the Library.

- - - - - - - - - - - - - - -

SOME RECENT PERIODIC LITERATURE AVAILABLE IN THE LIBRARY

Baldaccini, N.E. 1973 An ethological study of reproductive behaviour including the colour patterns of the Cichlid fish *Tilapia mariae* (Boulanger). *Mon. Zool. Ital.* 7:247-290.

Bertram, G.C.L. & Ricardo Bertram, C.K. 1973 The modern Sirenia: their distribution and status. *Biol. J. Linn. Soc.* 5:247-290.

Bolton, M. 1973 Notes on the current status and distribution of some large mammals in Ethiopia (excluding Eritrea). *Mammalia* 37:562-586.

Clay, T. 1974 The Phthiraptera (Insecta) parasitic on flamingoes. *J. Zool.* 172:483-490.

Forey, P.L. 1973 A revision of the Elopiform fishes, fossil and recent *Bull. Brit. Mus. (Nat. Hist.)Geol.* suppl. 10.

Heminway, J.H. 1974 "Scaly things that shuffle and lurk ..." (Review of "Eyelids of morning: the mingled destinies of crocodiles and men" by Alistair Graham and Peter Beard). *Nat. Hist. (New York)* 83:(2):78.

International Union for Conservation of Nature 1974 Coordinated systems of national parks and reserves in East Africa. *Bull. IUCN* 5:15.

- 1974 NGOs to create environmental centre in Nairobi. *Ibid.*:16.

- 1974 Tanzania to exploit wild life. *Ibed.*:20.

Kerrich, G.J. 1973 A revision of the tropical and subtropical species of the Eulophid gneus *Pediobius* Walker (Hymenoptera: Chalcidoidea) *Bull. Brit. Mus. (Nat. Hist.) Ent.* 29:(3).

Longhitano, N. & Bavazzano, R. 1973 Research on the vegetation of the middle valley of the Awash River (Ethiopia). *Webbia* 28:543-565.

Peterson, R. 1974 Variation in the African bat, *Tadarida lobata*, with notes on habitat and habits. *R.O.M. Life Sciences Occasional papers* No.24.

Stone, B.C. 1973 A synopsis of the African species of *Pandanus*. *Ann. Missouri Bot. Garden.* 60:260-272.

Taylor, E.H. 1973 A Caecilian miscellany. *Univ. Kansas Sci. Bull.* 50:187-231.

Van Someren, B.G.L. 1974 Revisional notes on African *Charaxes*. pt.9. *Bull. Brit. Mus. (Nat. Hist.) Ent.* 29:8.

- - - - - - - - - - - - - - -

QH
7
E135
S.I

E A N H S

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN OCTOBER 1974

CONTENTS

Migratory Pygmy Kingfisher in Coastal Kenya - - - - - - - - - - - - - - - 128
Cherengani Hills - Chiffchaff and Black Kite - - - - - - - - - - - - - - 129
The garsen Heronry on the Tana River - - - - - - - - - - - - - - - - - - - 129
Egyptian Tomb Bat - a first record from Uganda - - - - - - - - - - - - - 130
Egyptian Plovers in the Lake Rudolf area - - - - - - - - - - - - - - - - - 131
Sooty Gulls at Lake Rudolf - 131
Unusual lion behaviour and a white-striped Dik-Dik - - - - - - - - - - - 132
Marine Life Trip - 133
Letters to the Editor - 133
Review - 135
Flora of Upland Kenya - 136
Library Notes - 136
Lady Wilson - An Appreciation - 137
Lecture - 9th September - 138
Field trip to Lake Hannington 16th - 18th August 1974 - - - - - - - - - 138
Functions - 141
New Members - October 1974 - 142

MIGRATORY PIGMY KINGFISHERS IN COASTAL KENYA

The standard texts dealing with East African birds record only the nominate form of the Pigmy Kingfisher *Ceyx picta* from Kenya and Uganda, while the southform, *C.p. natalensis*, is listed as occurring north to central Tanzania, including Zanaibar and Pemba. In adult piumage *natalensis* has a blue patch on the ear coverts so that it may be readily recognised in the hand.

Benson (1964) has shown that *natalensis* is migratory in southern Africa, including Zambia and much of Tanzania, where it is a breeding visitor during the rains, from September to April. He listed four Kenya specimens, from the coast between Malindi and Kilifi in April, May and June; and five Uganda specimens in April, May, Jume and July. One would expect it in these areas (outside the breeding range) between April and September. Backhurst & Back hurst (1970) list *natalensis* for Kenya but not for Uganda.

At 0700 on 1st August 1974 a Pigmy Kingfisher was stunned as a result of flying into a window of our house at Shimo la Tewa School, Mombasa. It was an adult with a very distinct blue patch on the mauve ear coverts and was definitely an example of *natalensis*. When released after ringing it flew away strongly. Only six days later an identical bird was found at 0850 in a dazed condition on our verandah. It was eventually released though it flew away reluctantly. Each was in moult with a wing of 54 mm, weight 12.0 and 12.2 g respectively.

Though other species, especially estrildines, fly into houses, this most often happens in strong sunlight in our experience. On migration the Pigmy Kingfisher frequently flies into windows in the early morning as happened to five individuals in a five day period one September at a school where we used to live in western Zambia (Britton 1970). Thus it is possible that the bird at Shimo la Tewa was on southward passage.

Should anybody find an injured Pigmy Kingfisher it would be a good idea to attempt to race it (if adult), or if fatally injured to preserve the skin for racial determination at the National Museum. In this way we might learn to what extent Kenya and Uganda are regular off season quarters for southern breeders.

Peter & Hazel Britton,
Box 90163,
Mombasa, Kenya.

REFERENCES:

Backhurst, G.C. & Backhurst, D.E.G. 1970. A preliminary Checklist of East African birds. Kabete, Nairobi:duplicated.
Benson, C.W. 1964. Some intra-African migratory birds. *Puku* 2:53-66.
Britton, P.L. 1970. Birds of the Balovale District of Zambia. *Ostrich* 41:145-190.

CHERANGANI HILL - CHIFFCHAFF AND BLACK KITE

We visited the Cherangani Hills, to the east of Kitale in Kenya, over the weekend of 1st to 4th March 1974 and camped at the forest edge at 3000 m, 4 km SSE of Kameligon peak with Drs David and Jessica Aidley.

At 0900 h on 3rd March, we all heard a Chiffchaff *Phylloscopus collybita* near the camp; two or three times it uttered the very characteristic "chiffchaff" song followed by the weaker "hueet" call note: we are all familiar with the song in the UK and have no doubt that it was this species. As far as we know, this is the first record of the Chiffchaff from the Cherangani Hills although it has been recorded recently 100 km to the west on Mt. Elgon by Rolfe and Pearson (1973).

Later that morning, JFH and LMH saw a Black Kite *Milvus migrans* (race not ascertained) swoop over a stand of Giant Heather near the camp site and rise with a lizard-like animal with a curled tail in its talons. As the kite flew only as low as the tops of the heather, we suspect that it was a chamelion that it had taken which must indicate the acute vision of the kite in perceiving this normally slow-moving animal.

John and Lyn Harper,
Box 547,
Kericho, Kenya.

REFERENCE:

Rolfe, J.G. & Pearson, D.J. 1973. Some Recent Records of Palaearctic Migrants from Eastern Uganda. *EANHS Bull.* 1973:62.

- - - - - - - - - - - - - - -

THE GARSEN HERONRY ON THE TANA RIVER

In 1959, Myles North described the species which he encountered in August 1956 nesting in a large heronry near Garsen on the Tana River (*Jl E. Afr. nat. Hist. Soc.* 101:159-160).

On 30th June 1974 I was able to visit this same site, where I found about 2000 pairs of 13 species in a Henna *Lawsonia inermis* thicket in receding floodwater. There has evidently been no serious deterioration over this eighteen year period. The species which most interested me were Night Heron *Nycticorax nycticorax*, Purple Heron *Ardea purpurea*, Black Heron *Egretta ardesiaca*, Squacco Heron *Ardeola ralloides* and Glossy Ibis *Plegadis falcinellus*, all of which were nesting in comparable or better numbers than in 1956. The two most widespread coastal herons - the Little Egret *E. garzetta* and Grey Heron *A. cinerea* - were unaccountably absent this year, though they were present in good numbers in 1956.

This site may well have been visited several times between 1956 and 1974. I would be very pleased to hear from anyone who has visited this heronry, however scant their notes might be. I hope to revisit this site in future years and will eventually prepare a fuller report on my observations.

Peter L. Britton,
Box 90163, Mombasa.

- - - - - - - - - - - - - - -

EGYPTIAN TOMB BAT *TAPHOZOUS PERFORATUS* E. GEOFFROY 1818

FIRST RECORD FROM UGANDA

In 1971 I had the opportunity to identify a couple of bats donated to the National Museum, Nairobi. Amongst these were two females of *Taphozous perforatus* from Sukulu Hill, near Tororo in eastern Uganda collected by J.D. Hawkins on 13th November 1970, now registered NMN. 544-545.

In my paper on Sudanese bats (Kock 1969) I tried to clarify the taxonomic status of several of the Afircan forms named and gave a distribution map, for which no Uganda record was available. The species being widely distributed in African savannahs and more arid regions was to be expected to occur in Uganda, but has not yet been reported (*vide* Hayman & Hill 1971).

Both specimens have dark wings like the subspecies *haedinus* Thomas 1915 (from Chanler's Falls, Tana River) not whitish as in the subspecies *sudani* Thomas 1915 (from Mongalla, southern Sudan). The more important measurements (in mm) of both specimens are: forearm length 62.3, 63.4; condylo-canine length of skull 18.7, 18.3; bizygomatic breadth 11.8, 11.8; breadth across upper canines 3.9, 3.7; breadth across upper 3rd molar 8.4, 8.6; length of upper toothrow 8.3, 8.1; interobital width 6.0; 6.0; length of mandible 15.3, 16.1; length of lower toothrow 9.9, 9.9.

D. Kock,
Forschungsinstitut Senckenberg,
D-6000 - Frankfurt a.M.
Senckenberg-Anlage 25,
Germany.

REFERENCES:

Hayman, R.W. & Hill, J.E. 1971 In Meester, J. & Setzer, H.W. (Eds.). *The mammals of Africa, an identification manual.* Part 2: order Chiroptera: 1-72. - Washington.

Kock, D. 1969 Die Fledermaus-Fauna des Sudan (Mammalia, Chiroptera). *Abh.senckenb.naturf.Ges.* 521: 1-238.

- - - - - - - - - - - - - - -

EGYPTIAN PLOVERS IN THE LAKE RUDOLF AREA

During August 1971, eight Egyptian Plovers *Pluvianus aegypticus* were observed by Goddard (1972), in the extreme north western corner of Lake Rudolf between Todenyang and Namaraputh, the first record of this species for Kenya.

Recently, on 25th June 1974, I saw a party of 20 Egyptian Plovers on the west bank of the River Omo at Kalom in Ethiopia, 10 km north of Namaraputh. During the next two days parties of up to 4 birds were seen flying up and down the river in the neighbourhood of Kalom.

Urban and Brown (1971) record the Egyptian Plover as frequent to common in south-west Ethiopia (including the Omo Valley). It seems likely that the species occurs regularly in the limited area of the Omo Delta which lies within Kenya.

A.J. Hopson,
Lake Rudolf Fisheries Research Project,
Box 30465, Nairobi.

REFERENCES:

Goddard, M. 1972 Egyptian Plovers in Kenya. *EANHS Bull.* 1972:14.
Urban, E.K. & Brown, L.H. 1971 *A checklist of the birds of Ethiopia.* Haile Sellassie University Press, Adis Ababa.

- - - - - - - - - - - - - - -

SOOTY GULLS AT LAKE RUDOLF

On 25th April 1974, we were working on board RV "Halcyon", which was anchored in Crater Bay, on the north-west side of Central Island, Lake Rudolf. A flock of gulls consisting of about fifty Grey-headed Gulls *Larus cirrocephalus*, ten Lesser Black-backed Gulls *Larus fuscus* and three immature gulls of a species new to us, circled the boat seizing fish remains which were thrown overboard from time to time.

The three unfamiliar gulls were slightly larger than Grey-headed Gulls and noticeably smaller than Lesser Black-backed Gulls. The upperparts were evenly dark brown except for the upper-tail coverts which were white with the white extending half way up the back. The head and neck were the same sooty brown as the back, with the brown extending onto the upper breast where it merged indistinctly with the white lower breast and belly. There was a conspicuous black terminal band on the tail. A thin white bar ran along the rear edge of the wing and another fainter very fine white line slightly inside this, giving a double-barred effect. The underside of the wings was dark. The bill was long, heavy and similar to that of a Lesser Black-backed Gull in shape. It was coloured dirty bluish-grey, with a dark tip.

We sent a description to Peter and Hazel Britton who gave us their opinion that these gulls were almost certainly immature Sooty Gulls *Larus hemprichii*.

Recently we visited the Brittons at Mombasa and were shown Sooty Gulls in various states of plumage. We now confirm that the Lake Rudolf birds were of the same species.

Tony and Jane Hopson,
Lake Rudolf Fisheries Research Project,
Box 30465, Nairobi.

- - - - - - - - - - - - - - -

UNUSUAL LION BEHAVIOUR AND A WHITE - STRIPED DIK - DIK

On a recent safari with a group of tourists, the following interesting observations were made:

Lion *Panthera leo*

In the Mara Game Reserve, my party went out at dawn and were lucky enough to find a large pride of lion consisting of three lionesses and ten cubs, eight of which must have been the same litter as they were all the same size. The pride was feeding on a fully-grown male buffalo carcass which appeared to have been killed the night before. The cubs caused us great amusement as they were swinging from "Mama's" tail, climbing over her and biting her ears, and playing a game of tag with the buffalo's tail.

One of the lionesses then pulled the stomach from the carcass and took it about a metre away. Here she proceeded to break the stomach wall, extracted the contents and ate the stomach. This must have taken her about twenty minutes, and for the remainder of the time we watched the pride - a further half hour - this female spent all the time covering up the stomach contents with grass which she scraped up from all round the area. Naturally the cubs then came along and undid all her good work, but she chased them off, and continued to scrape grass over the patch. Occasionally she would break off from this and walk behind the carcass to the place where the buffalo had been killed. Again she would do the same thing, scrape piles of grass over the dried blood on the ground.

The following morning we returned to the kill for another look at the cubs. The whole pride was under a nearby tree, but the same female, recognisable by the rips in her ears, was back at the buffalo, still scraping grass over the place where the stomach contents had spilled. In the end there was a pile of grass nearly a metre high. Between scraping grass she would smell all round the area, and continue to scrape. It would appear that the smell of the stomach and dried blood was distasteful to this particular lioness, and she was attempting to hide it.

Is this commonly seen? I have watched many lions on kills and have never seen the behaviour before. I wonder if any member, maybe Mrs Rudnai, would have any comments to make on the subject.

Kirk's Dik-Dik *Rhynchotragus kirki*

While driving through the Amboseli Game Reserve towards Namanga, two of my drivers saw Dik-Dik which they described as looking like a Lesser Kudu!! Unfortunately, I did not see the animal, but Julius, a very observant driver, described the animal to me in detail. Apparently they came across two Dik-Dik, one a normal specimen, but the other had several white vertical stripes down the body. I can find no reference to Dik-Dik being marked in this way, and I again wonder if any member of the Society has any similar records.

Dennie Angwin,
Box 72833,
Nairobi.

- - - - - - - - - - - - - - -

MARINE LIFE TRIP

The Marine Life trip on 17th August 1974, explored the tidepools in the dead reef at the southern end of Kenyatta Beach, Bamburi.

The sea slugs or nudibranchs were particularly well represented; during the morning we saw a dozen species, including the Sea Hare *Dolabella* sp. and the red, orange and yellow Spanish Dancer *Hexabranchus* sp.

Nudibranchs (shell-less marine snails) are sometimes cryptically coloured, sometimes dazzling in colour and form. The loveliest that morning, found by the children, was velvety-black with electric-blue markings.

Fleur Ng'weno,
Box 42271,
Nairobi.

- - - - - - - - - - - - - - -

LETTERS TO THE EDITOR

Sir,

I would like to comment on the article by Mr and Mrs Harper (*EANHS Bull.* 1974:113-115), referring to the whereabouts of the House Marin *Delichon urbica* in its winter quarters. I share the same experience as John Smart did at Molo having lived at 2700 m for the last 27 years. I have found the House Martin to be one of our commonest Palaearctic migrants, with very regular arrival and departure dates. Since I started keeping records in 1960 the first arrivals are noted between 15th and 30th September, and they have mostly left on their return journey by the end of March.

There is no doubt that the feeding habits of these birds are closely related to the swifts. Except when seen on definite migration, nearly all the large concentrations have been seen when in company with swifts, when both species come down low under heavy storm clouds. As the storm moves off, so the birds depart in the same direction.

Size of flocks are difficult to evaluate, as the birds wheel about and rise and fall in altitude, but several times I have counted over 1000. Mostly about 50 - 100 birds are seen together. With an evaporating storm cloud, one sees the birds rise higher and higher until they disappear, and one can well understand why they are so seldom seen in ordinary weather. As in the case of swifts and some falcons such as hobbies, they can probably spy storm clouds from considerable distances, and so are seldom seen long in one locality. However, when the whole country is under dry conditions, the House Martins alter their feeding habits and spend all day flying low over the wheat stubbles into the stiff dry winds. This is not just a local habit, as on a visit to West Kilimanjaro, I found large numbers of House Martins flying low over the stubbles at 1800 m in March. Watching our local birds in particularly dry years, I got the impression that I was seeing the same flock each day. The birds were working slowly into a strong east wind as they fed, and I would see the same sort of numbers each day for a month or two. If this was the case, it is quite likely that the birds returned to roost in the forest a mile or two to the west.

I have only twice seen these birds settle; once about 50 on telephone wires, the other time when some birds out of a migrating flock settled on some dead Cedar trees. The time was nearly sunset, but each bird that was perched was seen chivvied off by another bird. The trees were rather near the edge of the forest, and perhaps the birds were seeking a roosting site further on. On the southerly migration the House Martin is usually seen working down forested valleys rather than on a broad front across the plains, and this leads me to think that the birds may often roost in the forests. Most of the high country where they are regularly seen have some suitable dry cedar forest. It seems hard to believe that they could roost on the wing - anatomically they are quite different to the swifts. Incidently, when I have seen the martins with swifts, the latter would always appear to be of the European species *Apus apus*.

Apart from the reasons discussed regarding scarcity of records for this bird, a possible cause of misidentification is that the birds are extraordinarily pale when they arrive in September - in fact some birds remain a light brown until the end of the year, and the white rump is inconspicuous except in the best light. As they are usually seen high overhead, they might easily be mistaken for other species of martins.

P.H.B. Sessions,
P.O. Mau Narok.

AERIAL ROOSTING

I have had many discussions with people about Swifts *Apus apus* and House Martins *Delichon urbica* roosting on the wing. Most I have spoken to seem disinclined to believe that aerial roosting is possible; it seems to me that, for such aerial birds as Swifts and House Martins, flying must be a rather 'automatic' function - like breathing. Wild animals (including birds) generally sleep less than, and less deeply than humans - generally they do not relax as we do. Is it so far-fetched then to postulate that Swifts and

House Martins roost on the wing? They would only need to maintain altitude (which one can observe them doing during daylight) with the minimum of wing flapping. Chances of collisions with other birds would be very small and collisions with physical objects (such as rocks) would be minimised since the birds would obviously select the roosting area or space in daylight to avoid such dangers.

I see no reason why House Marins should not roost occasionally in waterside vegetation alongside other swallows, nor why Swifts should not roost on rock faces or in cracks in rocks, it just seems incredible though that roosts of these two flocking birds should have been found so seldom. Perhaps Mr Sessions' observation suggesting that House Martins roost on bare trees in forest is correct, but, considering the number of this species which must winter in Africa, one would have expected definite sightings of roosting by now unless they do in fact roost on the wing.

Graeme Backhurst,
Box 29003,
Kabete, Kenya.

Sir,

With reference to Mr Reynolds' note on Bee-eaters eating bread, will the member who told me that he had seen a Pigmy Falcon *polihierax semitorquatus* eating bread at Amboseli please own up?

P.M. Allen,
Box 44486,
Nairobi.

- - - - - - - - - - - - - - -

REVIEW

EAST AFRICAN VEGETATION by E.M. Lind & M.E.S. Morrison, with a contribution by A.C. Hamilton. Published by Longman Group Ltd., Longman House, Burnt Mill House, Harlow, Essex CM20 2EJ England. pp.XIXI - 257, Plates 43 and Figs 1-8.3. Price £6.

The contents page of this book opens with a Preface, Acknowledgements, List of Plates, then an Introduction and Classification of Vegetation Types. This contains Part one, Forests, Part two, Vegetation and environment. Part one contains five vegetation types, 1 Forests, 2 Rangelands then bushed and wooded grassland with predominantly compound leaved trees, 3 Inland aquatic vegetation, 4 The vegetation of the Sea coast, 5 high mountain grassland. Then Part two Vegetation and Environment, covering 6 Climate and vegetation, 7 soils. Then an 8th section, The history of the vegetation by Alan Hamilton.

The book is profusely illustrated with 1 - 8, figures and profiles of the vegetation types and numerous lists of the species found in the different vegetation types. There is a very full bibliography of 24 pages going back as far back as 1906 and finally an Index of plant names of 15 pages and 7 pages of a General Index.

To teachers, students and others studying vegetation in East Africa, this book is essential and as the publishers say on its dust cover "Is intended for the use of college and university students with some knowkedge of ecology, and as an introduction to the country for all those going to work there in agriculture, forestry, wild life management or plant ecology. It will also prove of interest to the general reader and the increasing number of tourists who want more information on the rich and varied plant life of East Africa".

Figs. 2.17 and 2.18 are mixed. *Terminalia* has only one wing surrounding its fruit whilst *Combretum*, most of which have 4 wings. *Milattia*, p.245 should be spelt *Millettia* and *Combratum* p.28 should be *Combretum*. There are possibly other mispellings.

From the Index of Floras, p.235 Dale, I.R. and Greenway, P.J. (1961), Kenya Trees and Shrubs, pp.653, Nairobi, Buchanans Kenya Estates Ltd., in association with Hatchards, London, has been ommitted but it is included in the bibliography p. 214.

P.J.G.

- - - - - - - - - - - - - - -

FLORA OF UPLAND KENYA

This important work is about to be published at KShs.170.00, however, members of the Society can purchase it for KShs.136.00. Please send your cheques, made payable to the Society, to the Hon. Secretary, Box 44486, Nairobi.

Ed.

- - - - - - - - - - - - - - -

LIBRARY NOTES

I feel that the announcement about security in the last *Bulletin* calls for rather more comment. Once when I was on a course for Librarians in London, we were taken to see the extremely beautiful and valuable library of the Royal Institution. We should be astonished, the Librarian told us, at the way the Library was run. There are no rules. The books belong to the Fellows, and they do as they like with them. If only we could say the same about our library! "The books belong to the members, and they do as they like with them". But this assumes of course that members have a high standard both of care of books and of consideration for fellow members. Alas! "Science began as a hobby for gentlemen" and has now become a race for cads.

However, though there does exist the cad who will deliberately deprive other cads of the literature essential to their work, a far commoner enemy in a library like this is the reader who says to himself "I am the only person here who is interested in this" and therefore takes it. I have heard someone say "No one ever looked at it there, so I thought I might as well take it". I remember in one institution a member of otherwise blameless character (as far as I know) who considered that she was the only person who appreciated the *New Statesman* and regularly took it out of the common room as soon as it arrived.

The best cure, or at least palliative, for this sort of thing is surely obvious. There is little we can do about deliberate malice or the decay of public morals, but if we took an interest or more interest in our library I believe most of these depredations would stop. You can tighten up the rules for one thing. If readers know that a library is watched over and taken care of they are less likely to steal or mutilate, just as if they know that they will get reminders they are more likely to bring books back off loan in time. But there is one thing which every library needs, and without which keen staff and ample funds are of no avail, and possessing which any library however small and scruffy is well on the way to greatness. This first essential is - *a large number of complaining readers.* We may not be able to say "the books belong to the members", but they are the best guardians. It is they who in the end will obtain money for new books and furniture. Without them a library is dead and open to the attacks of tomb robbers.

P.M. Allen, Librarian,
Box 44486, Nairobi.

- - - - - - - - - - - - - -

LADY WILSON - AN APPRECIATION

The Society has suffered a sad loss in the death of Elizabeth Wilson, who with her late husband, Sir Frank Wilson, had farmed at Ulu for many years.

She joined the Society in 1936 and never ceased to take the greatest interest in all its activities. Despite advancing years and the handicap of a severe leg injury which rendered her incapable of walking far, she took part in many of the camps and expeditions organised by the Society and was never happier than when camping or on safari.

She had a great love for and intense interest in the wild life around her and both she and her husband were keen conservationists and pioneers in the matter of water and soil conservation on their farm at Ulu.

With her keen and lively mind and great kindness and hospitality especially to young people, she will be greatly missed.

F.M.E.

A kind letter has been received from Mrs D.E. Blunt enclosing a donation of Shs.100/- and suggesting that we should open a fund for some special project in memory of Lady Wilson.

The publication of scientific papers is one of the objects for which the

Society exists, and there is never enough money available to publish as many as we would like. Would friends of Lady Wilson care to send donations to finance a publication on some subject of special interest to her - some aspect perhaps of the Conservation of Natural Resources? I always think of the Wilsons in that connection myself. When I first came to the country in 1931 I remember their farm being pointed out to me as an object lesson in wise and far-seeing land use. They had not, I was told, destroyed the balance of nature in any way. They had left the trees and had constructed many dams There was no over-grazing and no soil erosion and they supplied Mombasa with milk.

P.M.A.

- - - - - - - - - - - - - - -

LECTURE - 9th SEPTEMBER 1974

Members heard a most interesting lecture on 9th September from Mr T. Huels on the work he is doing on Superb Starlings *Spreo superbus*. These are birds which we all know and like, and it is amazing that so little should be known about them, until we realise how many hours, days and weeks of careful watching and patient note-taking are required to unravel the secrets of their lives. Mr Huels' study has revealed unexpected complications. Not for them the simple plan of pairing and nesting with perhaps flocking in the non-breeding season. We all know that they are gregarious, but Mr Huels' flock of about 20 adults and juveniles remains a co-operating unit throughout their cycle. A further difficulty is that there is no sexual dimorphism. Males and females are exactly alike and there is no telling the one from the other until you see them copulating. Mr Huels has colour ringed his whole flock and has been able to construct tables showing the contacts and interactions of each with the rest. There seems to be the usual social hierachy, but though a particular male and female will be associated, other males will copulate with the female and it is impossible to say which is the father of the chicks. They may nest in the thatch of the bandas (Mr Huels is based on Bushwhackers Safari Camp near Kibwezi), but they prefer to take over the nests of the White-headed Buffalo-Weaver *Dinemellia dinemelli*, even turning out the eggs. Sometimes the Buffalo-Weaver retaliates and throws out the Starling's eggs.

In a lecture so packed with detail it is impossible to review every point. We are glad to learn that Mr Huels is staying for another year, and hope that he will speak to us again. The study when published will make fascinating reading.

P.M.A.

- - - - - - - - - - - - - - -

FIELD TRIP TO LAKE HANNINGTON 16th - 18th August 1974

The 30 or more Society members, children and guests who joined this outing were lucky to find the Hannington area at its greenest, and encountered little dust on its access roads. In fact a small advance party pitching camp on the

Friday afternoon found themselves in light rain for the whole evening.

At least two hours of driving should be allowed from Nakuru, unless one cares neither for the suspension of one's vehicle, nor for the occasional dikdik dashing across the road. It is now possible to remain on tarmac (Nakuru - Eldama Ravine) to within a few kilometres of Mogotio, a centre of Kenya's sisal industry. Eighteen kilometres beyond Mogotio, after bush and tress have replaced the sisal plantations, the Lake depression becomes clearly visible at a distance and this helps orientation. Another 24 km to Maji ya Moto should be tackled at low speed as bumpy ditches, sandy and rocky river beds, and sometimes rough gravel have to be traversed. Another access route, Solai - Kisanana - Mukuyuni, was found perfectly passable by one member, while Mugurin - Kisanana should not be attempted: I tried when returning and ended up caught in between cattle fences.

At Maji ya Moto, a village of a dozen huts, the motorist turns right and is usually followed by a local lad on a bicycle who, at a barrier, charges Shs.5 admission per car and Shs.1 per person on behalf of the South Baringo Area Council. There are five more kilometres and two steep ridges to be covered till one approaches the lakeshore. We camped at the main campsite a few hundred metres north, near several flagpoles and two white-painted cabins in which vandalism has blasted the intended advance of civilized human waste disposal. One could motor only a few hundred metres more, to a ravine which allows only 4-wheel-drive vehicles to go beyond. In a southerly direction, an ordinary car can do 3 km then stopping before an even less negotiable rocky ridge. On foot we climbed easily across for the customary Sunday morning bird walk. (There is also a track leading from a south-westerly direction to the southernmost tip of the Lake, which is known to campers, but accessible to 4-wheel-drive only.)

Lake Hannington is 16 km long and 4 km across at its widest, shallow, and has water slightly less alkaline than Lake Nakuru. Its name has been Africanized to 'Baragoi' - though J.W. Gregory knew it as Lake Losuguta when exploring the Rift Valley in 1893. Some of the rivers feeding it must be quite formidable when in flood, judging from their beds; in spite of the recent rains, we found these all dry.

The Lake's greatest attraction are no doubt the hot springs and steam jets. A cluster of two dozen of those emerges from the ground between the main campsite and the lakeshore (the "Central Springs"). There are many more around the southern half of the Lake but nowhere more than five or six together. In craters 6-10 m across, steaming with heat, continuous bubbles well up in the middle. One geyser spouts water up rhythmically to twice a man's height. At night-time, noises from these unearthly terrestrial activities seemed to get louder, and more vapour condenses in the cooler air. As for practical uses, I managed to prepare stew from its raw components in less than three hours, soft-boiled egg in 6 minutes - placing the pot in shallow water of a "crater pond". At a cleaner jet spring beyond the "ravine", I filled a bottle, put it in the 'fridge when returned to Nairobi, and found its contents a deliciously -tasting mild mineral water.

Nevertheless, I would wish Hannington neither to develop into a Kenya Karlsbad nor an energy base for an East African Ruhr*gebiet* (as one foreign newsmagazine put it exaggeratedly two years ago). The energy people may of course still have their way, there and in Hell's Gate, but to me, Hannington or Baragoi with its backdrop of an escarpment rising to 600 m, appeared rather like a miniature reflection of Lake Manyara. It could be turned into a game park; extensive re-stocking would have to be undertaken, however. For in spite of its apparently suitable habitat, members detected no mammalian wildlife other than baboon, dikdik, a lonely impala buck, and a hare. Is it because the local herdboys tending their cattle and goats are all armed with bows and arrows? Yet human habitation is so thinly scattered, with no more than four huts discernible along the entire eastern (steeper) lakeshore, and denudation of plant growth plus erosion through the existing cattle and goat herds not by any means as severe as around Lake Baringo. A few Tugen tribesmen gathered around our camp on Sunday, staring curiously but friendly; I found it useful to have brought extra drinking water, bread and sweets for them.

Birdlife is more abundant, and members compiled a list totalling 78 species seen. As one might expect, Lesser Flamingo *Phoenicopterus minor* are by far the most numerous, though my guess was more in terms of thousands than tens of thousands for the whole Lake. a rather large number seemed to have perished recently while some sick and weakened individuals could be approached very closely. Observed in small flocks were Egyptian Geese *Alopochen aegyptiaca* and Sacred Ibis *Threskiornis aethiopica*, frequent but less gregarious Spurwing Plover *Vanellus spinosus*. Rare in one or two specimens each, Greater Flamingo *P. ruber*, Crowned Crane *Balearica pavonina*, Fish Eagle *Haliaeetus vocifer* and Tawny Eagle *Aquila rapax* presented the "showpieces" of birdlife. Of smaller kinds, some campers had Golden-backed and Yellow-backed Weavers *Ploceus jacksoni* and *melanocephalus* nesting directly above their tents, in one instance nest-building could be observed at 4 m distance. The complete birdlist of this excursion is available at the Museum Library.

As a complement to the Lake Hannington trip I would recommend to members a visit to "Hannington View" should they find themselves near Nakuru on a clear day with good long distance visibility, and with two or three hours to spare; mornings are preferable for photography. Three kilometres from Nakuru Post Office towards Nairobi, turn left near the Caltex Station/ Hyrax Hill (start), continue on tarmac past Bahati Police Station (15 km, 9.5 miles -- all distances in parentheses are speedometer readings from the service station), on gravel then turn left (24.6 km, 15.4 miles), right near Milton's Farm (26.7 km, 16.7 miles), after Reeder's Estate left (31.2 km, 19.5 miles), right again (31.7 km. 19.8 miles) leaving Milton's Siding to your left; cross railway line (32.8 km, 20.5 miles), go down a steep hill (32.6 km, 21 miles) and turn right at the foot of a long hill (35.7 km, 22.3 miles). What is striking on this drive is the transition to ever drier types of habitat and vegetation. Continue through Kisanana village (39.2 km, 24.5 miles) straight, pass Mgendall (45.1 km, 28.2 miles) and Ngendalel (52.8 km, 33 miles) villages. In front of a small rocky hill take the turn to the left (59.5 km, 37.2 miles) and 100-200 m further enter a large circular clearing to your left, from whose outer rim you look down a steep escarpment upon Lake Hannington stretched out 6 - 700 m below, with the Kamasia - Tugen Hills behind, and the Elgeya Escarpment far in the distance. It is one of the great scenic sights of Kenya, adding to one's unforgettable memories of its natural granduer.

Franz Rader,
Box 30560,
Nairobi.

- - - - - - - - - - - - - - -

FUNCTIONS

*** CHANGE OF DATE Monday 7th October 1974: 5.15 p.m. Lecture Hall National Museum, Nairobi. Talk and slide show by Mr John Karmali on his recent visit to the Galapogos Islands.

19/20/21st October 1974: Weekend camp led by Prof. N. Skinner - in the Kibwezi Forest area. Details will be sent to members later.

8/9/10th November 1974: Baringo Weekend:- Accomadation for 24 people. 12 doubles at sh.100/- per person, per night, including boat trip at the Baringo Lodge.

17th November 1974: Day Walk - to be led by Miss P. Allen - details in November *Bulletin*.

- - - - - - - - - - - - - - -

New Members October - overleaf.

NEW MEMBERS - OCTOBER 1974

Full members:

Miss S. Brown, Kenton College, Box 30017, Nairobi.
Mrs N. Chance, Box 24846, Karen, Nairobi.
Mr J. Gaudet, Kenyatta University College, Box 43844, Nairobi.
Miss L. Gaffikin, c/o Prof. London, Box 30197, Nairobi.
Mrs M. Gray, Box 18042, Nairobi.
Dr Manfred Kaib, Box 30772, Nairobi.
Mr A. Logan, Box 47209, Nairobi.
Mr N. Munyori, Wild Life Clubs of Kenya, Box 40658, Nairobi.
Miss L.M. Perez, Box 40658, Nairobi.
Mrs R.B. Sawdon, Box 30521, Nairobi.
Mr R.J. Sharples, Box 24817, Karen, Nairobi.
Mr R. Tarble, Box 30259, Nairobi.
Dr W. Tickell, Box 30197, (Dept. of Zoology) Nairobi.
Mr R.G. Timmis, Box 115, Kiambu, Kenya.

Junior members:

Miss c. Hunter, Box 15041, Nairobi.
Philip Johnson, Box 49163, Nairobi.

- - - - - - - - - - - - - -

QH
7
E135
S1

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN NOVEMBER 1974

CONTENTS

Co-operative breeding in Red-and Yellow Barbets - - - - - - - - - - - - 144

A short account of Ticks - 146

Lions, Civets and Servals - 148

Klipspringer in association with Red-wing Starling - - - - - - - - - - 149

The Olive Ridley Sea Turtle in East Africa - - - - - - - - - - - - - - 150

Review - 151

Back Numbers of the *Journal* for Sale - - - - - - - - - - - - - - - - 151

New Members - 152

Letters to the Editor - 153

Observations on a Barred Owlet family - - - - - - - - - - - - - - - - 154

Functions - 155

New Members - November 1974 - 155

Some recent periodic Literature available in the Library - - - - - - 155

CO - OPERATIVE BREEDING IN RED - AND - YELLOW BARBETS

Co-operative breeding (i.e., a mated pair being helped in the chores of nesting by other full grown, though not necessarily sexually mature, birds, often their offspring from a previous brood) is becoming recognised as a not uncommon phenomenon in tropical birds.

During late April and early May 1974 I found four nests of the Red-and-Yellow Barbet *Trachyphonus erythrocephalus* and was able to make fairly lengthy observations from a hide at two of them.

The first nest was in the side of a *karongo* running into the west side of Lake Magadi, Kenya about 1.5 km from the hot springs at the south end of the lake. During the course of observations between 29th April and 2nd May I found that the nestlings were being fed by at least three adult birds - a female and two males. At no time did I see more than three barbets at or near the nest.

The second nest was in a *karongo* off the Nairobi - Magadi road approximately 50 km from Nairobi. Initial observations soon revealed that two separate males were taking food to the nestlings, but it was not until I saw four birds entering the nest to roost that I realised the breeding unit consisted of four birds. Subsequently I saw two females at the nest with food at the same time. Feeding visits at both nests are summarised in Table I.

Apart from one orange berry all the food I saw being taken to the nestlings at these two nests consisted of arthropods. Fairly large, green moth caterpillars were the most frequent items, but grasshoppers, harvestmen and centipedes, including a probable *Scolopendra* about 7.5 cm long, were also being brought as well as various smaller items that I was unable to identify but which were probably ants or termites.

Shortly after dawn, as described by Sir Frederick Jackson, Red-and-Yellow Barbets gather together in a bush or tree ".. to work themselves up into a great state of excitement and perform many curious antics." Since these displays are accompanied by repeated calling that can be rendered as 'tock-tock-tock-tcheeerrr' I refer to them as 'tocking parties'. My observations at the above nests indicate that these consist of the breeding unit centred on a particular nest but it is possible that units from adjacent nests (which may be only 70 - 80 m apart) may join to form a larger tocking party - a point I hope to investigate in the future.

Co-operative breeding has also been recorded in the following species of African barbets: Black-collared *Lybius torquatus* (Skead, 1950); White-headed *L. leucocephalus* (van Someren, 1939, 1956, and personal observations); White-eared *Buccanodon leucotis* (Oatley, 1968).

REFERENCES:

Oatley, T.A. 1968 Observations by W.M. Austen on the breeding biology of the White-eared Barbet *Buccanodon leucotis* (Sandervall). *Lammergeyer* 8: 7-14.

Skead, C.J. 1950 A study of the Black-collared Barbet *Lybius torquatus* with notes on the parasitism by the Lesser Honey-guide *Indicator minor*. *Ostrich* 21:84-96.

van Someren, V.G.L. 1939 Birds of the Chyulu Hills (Part 2) *Jl E.Africa Uganda nat. Hist. Soc.* 14: 15-129

------------------ 1956 Days with Birds. Mus. Press: Chicago.

TABLE 1: Summary of Feeding Visits at two nests

of *Trachyphonus erythrocephalus*

NEST	DATE	PERIOD OF OBSERVATION		NUMBER OF VISITS			AVERAGE INTERVAL BETWEEN FEEDS MINUTES
		START	DURATION MINUTES	BY MALE(S)	BY FEMALE	TOTAL	
I	30/4/74	0810 h	230	12	10	22	10
2M, 1F	1/5/74	0815 h	285	7	8	15	19
	2/5/74	0845 h	165	11	4	15	11
II	5/5/74	0722 h	250	33	0	33	8
2M, 2F	5/5/74	1425 h	120	5	0	5	24
	6/5/74	0705 h	300	25	5	30	10
	11/5/74	0715 h	290	25	10	35	8
	12/5/74	0655 h	397	36	41	77	5
TOTALS			2037	154	78	232	9

J.F. Reynolds,
Box 40584,
Nairobi.

A SHORT ACCOUNT OF TICKS

Ticks will be familiar creatures to most people living in East Africa, although a few words may be helpful in understanding their place in nature, however I am not advocating a Tick Conservation Society: you may continue to kill them (if you can) and you dont need a Game Department licence to do so.

The great phylum Arthropoda is divided into a number of classes of animals all of which have the "skeleton" on the outside of the body. The class Insecta contains by far the largest number of species - most people know an insect when they see one although they may think some creatures are insects when in fact they are not. The arthropod class Arachnida contains far fewer members than does the Insecta; the class is divided into about ten orders, one of which, the Acarina, contains tha mites and ticks. (Other orders in the Arachnida comprise scorpions and spiders, amongst others.)

Two families of ticks are found in East Africa: the first, the Argasidae or soft ticks, are not so familiar as the Ixodidae or hard ticks. All ticks are blood-sucking parasites of vertebrates although in a few species some stages do not feed at all. Argasids usually secrete themselves in crevices in the resting places or nests of their hosts; they come out periodically to feed. I will not discuss them further here. The Ixodid ticks are those most often encountered in East Africa; a typical life history is as follows, starting from the egg which is laid in a single batch, often containing several thousands, on the ground. A small six-legged larva hatches from the egg; after a short period during which the cuticle hardens, the larva climbs vegetation to await the passing of a suitable host. Because the number of eggs laid by one female is very large, larvae are found in great numbers together, thus, while in the bush, one person can become covered with larvae (= "pepper ticks"),a companion a short distance away may remain tick-free. Once on a suitable host, the larva will usually seek a particular part of the animal on which to feed. The larva feeds on blood by piercing the host's skin with its mouth parts, until it is engorged i.e. several times bigger than it was when unfed. On engorgement the replete larva falls to the ground where it moults into an eight-legged nymph which behaves in a similar way to the larva. When the engorged nymph falls to the ground it will moult into either a male or a female adult tick. The adults also climb vegetation and attach to a suitable host; mating takes place on the host (in most species) and both sexes feed to become fully engorged, however it is only the female that increases many times in size; this is possible because part of the body (the alloscutum) is able to stretch; the male's scutum is fixed in size and only a limited amount of extension is possible on the ventral (under) side. The female falls to the ground on engorgement whereas the male may stay on the host for some weeks before falling off and dying. Once on the ground the female lays her eggs and dies.

The life cycle described is that of a typical three-host tick; the three hosts may be of the same or different species, usually the two immature stages feed on different host species from the adult, indeed the hosts of immature ticks are often still unknown. Some ticks have a two-host life cycle where the larva and nymph feed on the same individual host, then the adult will have to seek a second host. Ticks of the genus *Boophilus* have a one-host life cycle where all stages feed and moult on the same individual, only dropping off as engorged adults.

Many ticks are very host specific while others are more catholic in their choice of host. In some genera the immatures feed on birds and the adults on reptiles or mammals; in others the immatures occur on small mammals while the adults feed on large mammals. Some hosts can support a number of different tick species while other animals frequently only carry one species. There are only 13 genera of ixodid ticks in the world, ten of which occur in East Africa, I will mention the ones most often noticed.

The genus *Amblyomma* comprises large ticks, often brightly (and beautifully) coloured; the adults are found on large mammals and reptiles, the immatures sometimes on the same hosts as the adults but also on birds. *Hyalomma* ticks are usually dark, unpatterned but with banded legs; the immatures occur on birds and small mammals, the adults on large mammals. Many species of *Rhipicephalus* are found in East Africa: most are small sombre ticks although some are ornamented, notably the well known *R. pulchellus* the "Zebra tick". *Rhipicephalus* species are found almost entirely on mammals, some being very host specific others less so. *Ixodes* contains the most species of any tick genus and many new species undoubtedly await discovery. The ticks are small and often males are not found on the hosts; they parasitise birds and mammals, many species are known from only one or two specimens. *Haemaphysalis* species are found on birds and mammals, some being very host specific; the common dog tick over much of East Africa is *H. leachi* but it also occurs on wild carnivores and occasionally on other mammals. Two species of *Boophilus* are found in the area, most commonly on domestic cattle - they are unaccountably rare on wild herbivores.

Ticks are of tremendous economic importance since many carry disease organisms, some of which are fatal to man and domestic animals. Vast sums of money are spent trying to eradicate ticks from domestic stock and the process is hampered by the fact that ticks can become resistant to the chemicals employed for their control. As is so often the case with "pests", ticks are almost only "pests" to man and his domestic animals; wild animals strike a balance with their tick faunas and although disease organisms may circulate in the ticks and their wild hosts these are rarely pathogenic to the wild animals (or to the ticks).

I should be happy to identify ticks collected in Kenya; (members living outside Kenya who want ticks identified should write to me for further information). Ticks found on man, large animals and vegetation are best preserved in 70% ethyl alcohol (gin will do!) or formalin or they can be kept alive in, for example, a 35 mm film can. Members who can collect from birds and small mammals (including bats) are referred to the third paragraph in "Ringing News" (*EANHS Bull.* 1974:38.

I thank the Director of Veterinary Services (Kenya) for permission to publish this note.

Graeme Backhurst,
Veterinary Services Division,
Ministry of Agriculture,
P.O. Kabete, Kenya.

LIONS, CIVETS AND SERVALS

In response to a recent request for more material on mammals in the *Bulletin*, readers may be interested in the following short items concerning observations made on recent safaris.

In a previous edition, (*EANHS Bull.* 1974:132-133) Angwin recorded unusual behaviour in a lioness *Panthera leo* at a buffalo carcase. We observed similar behaviour in a lioness in Tsavo West (Rhino Valley) on 16th September 1974. A male buffalo had been killed by a small pride (lioness and four large cubs) and when we located the kill (10.00 hrs.) the buffalo's stomach had been torn away and the contents spilled on the ground nearby. At this time the lioness was guarding the carcase and the cubs were under a tree some 30 m away. After about ten minutes the lioness started to pick at the carcase and was joined by one of the cubs. She then lost interest in eating and started scraping a small pit for a latrine, in typical felid manner, amongst the stomach contents. This was used for its required purpose and then covered over - again in typical fashion. This covering-up continued, however, well beyond its functional time, and when we left the lioness was still raking up stomach contents half an hour later. In ethological terms it seemed that a releaser mechanism for this particular behaviour pattern had been triggered, but that consummation of the motor action was not achieved due to the continual presence of the triggering stimulus. In both our case and Angwin's case it seems as if the stimulus was provided by the smell of the buffalo stomach contents.

The night before this event we stayed at the Ngulia Bandas. We were fortunate enough to be given Banda No.1, the one nearest the waterhole, and at 20.30 hrs. we located a civet *Civettictis civetta* by means of torchlight. We watched the animal for nearly half an hour as it nosed among the rocks just below. At one stage it came on to a large rock about 3 m away from the parapet of our banda. Although wary, the animal showed no particular alarm at our presence, and from its rather resigned behaviour seemed fairly used to the procedure of scavenging and hunting by torchlight. Other visitors to Banda No.1 have undoubtedly seen this animal (we could just make out a second animal, probably a civet, at the edge of torchlight range), and we would urge future visitors to look out for it. Its black face markings give it rather a mournful look, but it should make an excellent flashlight subject.

On 24th March, 1973 we were camping in the Aberdares with some friends. Our camp was at a well-used site in a clearing in a small forested area on the moorland, approximately 6 km along the East Gate road beyond the main junction of the Kiandongoro Gate road and the East Gate road. Four of us were sitting round our camp fire at about 21.00 hrs. when an animal was seen on the edge of the clearing some 30 m away; this was quickly identified by torchlight as a serval *Felis serval*. The animal was up-wind from our camp and fire, but the camp was well lit by three lamps and we were talking. Despite this the animal came unhesitatingly towards us, finally stopping three paces (subsequently measured) from us. We continued to talk in low voices and shone our torch. After a brief moment the serval moved on up the track past our tents and disappeared. At no stage did it show any sign of fear or apprehension of the lights, our voices or our scent as it moved down wind. The impression gained was of an animal totally used to, and unafraid of, the presence of humans. We wonder if it could, at an earlier stage in its life, have been cared for or reared by somebody, and had subsequently escaped or been released. Its return to our site during the night was evidenced by the presence of fresh droppings noted next morning about 3 m from the fire.

Next morning while driving over the moorland, about 3 km north of our camp site, we had a brief sighting of a melanistic serval. The animal, which was a pure glossy black, was trotting along the edge of the road (approximately 08.00 hrs.). As soon as our vehicle appeared it dived into the thick grass and scrub at the edge of the road and was not seen again.

The Aberdares seem to be a good place to see servals, since we have seen them now on three occasions in four visits.

A.D. and R.M. Irvin,
E.A.V.R.O.
P.O. Kabete, Kenya.

- - - - - - - - - - - - - - -

KLIPSPRINGER IN ASSOCIATION WITH RED - WING STARLING

On 15th September 1974, I was in charge of a safari party doing a game drive at Lobo Springs, northern Tanzania. The time was about 17.30 hrs. and the location near a long rock to be found on the left hand side of the track a mile or so after passing the water pump installation. Alongside a practically bare section of this rock and about 40 m from the vehicle a klipspringer *Oreotragus oreotragus* was observed, standing stationary. It was noticed that, perched on its throat, a Red-wing Starling *Onychognathus morio*, continuously for several minutes moved around its head, neck and throat and on its shoulders, apparently searching for insects or possibly ticks. All this was clearly visible through binoculars. The klipspringer stood perfectly still while under observation, possibly thinking it was undetected. The starling remained on the animal's head and shoulders and showed no indication of wanting to leave the animal, either to pick up insects from the ground, perch on a nearby bush or small shoulder of rock, about a metre away. Never having seen behaviour of this kind before, although I personally have seen Red-wing Starlings at Lobo on numerous occasions, I made a careful record. We were all very surprised when, about 2 km on, towards the lodge we saw this incident precisely duplicated, almost certainly by another klipspringer and another Red-wing Starling.

H.M. Gordon,
Box 44701,
Nairobi.

- - - - - - - - - - - - - - -

THE OLIVE RIDLEY SEA TURTLE IN EAST AFRICA

In the course of a survey of marine turtles in East Africa I have found that the Olive Ridley Sea Turtle *Lepidochelys olivacea* not only occurs but also breeds; this species may be much more common than was previously expected. I know of only one documented record of the Ridley in East Africa, and up until a few years ago it was not even known in the western Indian Ocean. George Hughes, working out of the Oceanographic Research Foundation in Durban, found good evidence for a large breeding population in Mocambique.

I have spoken to Bajun fishermen in Kizingitini, (Lamu) and understand that they have a small turtle called 'Kigange'. Their description of this animal sounds convincingly like that of a Ridley, and they claim that it is common. Pemba fishermen I was able to talk to while in Malindi spoke of a turtle, 'Kibora', which also seemed to be the Ridley. Fishermen from farther south in Tanzania do not seem to know of this animal and this is worrying in terms of distributional evidence.

I have seen specimens of Ridleys in: Zanzibar (2 adults and a hatchling in the E.A.M.F.R.O. Museum brought in by fishermen); Kunduchi (2 adults washed up dead on beaches, evidently killed by dynamite blasts); Sadani (an adult carapace with a fisherman, taken in a fish net); Maziwi Island off Pangani (a nesting female was tagged); Malindi (in the Marine National Parks' store, taken from a fisherman/poacher); and fragments of a shell on the beach at Mambrui.

Surely there must be more specimens of this species lying about in need of recognition? However, judging from the massive non-response to the turtle questionaire circulated with the *EANHS Bulletin* in April, perhaps I am too optimistic.

As there are only four other species of sea turtle in the western Indian Ocean, it is not difficult to differentiate the Ridley. The Leathery Turtle *Dermochelys coriacia* is unique in having a leathery skin in place of horny epidermal scales; it is huge, and living in deep water is rarely seen. Green and Hawksbill Turtles are common in East Africa. The Hawksbill *Eretmochelys imbricata* has a narrow head and a hawk-like beak, with thick overlapping scales on the carapace. The scales on the limbs are black with yellow margins. The Green Turtle *Chelonia mydas* is the only turtle that has only one pair of scales immediately above the nostrils. The scales on its soft parts are chestnut brown. The Loggerhead *Caretta caretta*, itself poorly known in East Africa, has often been confused with the Ridley - by would-be experts up until recently. True to name, it has a massive head, is red-brown in colour, and the adult carapace can be over a metre long. There are usually two dozen small scales running round the edge of the carapace with three rows of five large scales (i.e. a total of 15 large scales) covering the greater part of the carapace. There are no conspicuous pores in the edge of the plastron (bottom shell), and there are usually several small scales covering the bottom of the mandible.

The Olive Ridley is distinctive in having pores in the edge of the plastron and one major scale covering the bottom of the mandible. The carapace is flat and usually wider than long, with thin olive-coloured scales. These scales are often arranged symmetrically and there are more than 15 major scales. Like the Loggerhead, the Ridley has a massive head, but the carapace is rarely more than 80 cm long.

ANY information about this animal (or the Loggerhead) would be very useful. Breeding times and places are still only poorly known for the common Green and Hawksbill Turtles and even the tiniest shred of evidence could be valuable.

Jack Frazier,
East African Wildlife Society,
Marine Turtle Survey,
Box 20110,
Nairobi.

REVIEW

Owen, D.F. & Owen, Jennifer (1974). Species diversity in temperate and tropical Ichneumonidae. *Nature* 249: 583-584.

Although the reasons are not understood, in most groups of organisms, more species are found the nearer one moves to the equator. In this Letter to *Nature* the Owens give data from four localities which strongly suggest that the Ichneumonidae (parasitic Hymenoptera, mostly small) do not follow this general rule. They looked at samples from three gardens (in Kampala, Freetown, Sierra Leone and Leicester, England) and from a piece of "disturbed land along a small stream" in southern Sweden. The Kampala garden produced 293 species, the Freetown 319, the Leicester 326 and the Swedish plot 758 species.

Apart from the importance of the paper showing as it does this reversal of normal species diversity theory, an interesting sentance occurs: "There are, however, more species of Ichneumonidae than of vertebrates, and in few groups of animals can there remain so many undescribed species."

GCB.

BACK NUMBERS OF THE *JOURNAL* FOR SALE

A little while ago the old gun-room at the Museum was cleared for other purposes and a large number of Journals which had been stored there were moved into the Library. Most of them belong to what one can think of as the first series, up to No.80 of 1944. An index was issued then and the format of the Journal changed. No complete set of these early numbers is available now, though of course there are two sets in the Library for reference and borrowing by members. The bundles cleared out of the gun-room consist of redundent copies of certain numbers. Hitherto these have been on sale to members at Shs.15/- each, but as so many have been found, our Committee feels that members might like to buy them for half price, if they knew what was in them, and thus produce funds for the publication of new

Journals. A list of the main articles is enclosed with the Bulletin this month, and it will be seen that they contain much of great interest.

in those days the modern proliferation of societies and journals had not yet taken place and our Society worked in a wider field than it does today. The proliferation of professional research workers had not yet taken place either. The Society was served by a band of able and distinguished men, most of them amateurs, earning their living as Administrators, farmers, dentists and so forth. The supporters for whom they wrote were mostly amateurs too, and the Journal was in many ways more like our present Bullstin than the Journal of modern times. In addition to the main articles listed, each number contains short notes and reviews that would nowadays go into the Bullstin. Annual reports and accounts are also printed in the Journal and cast light on the early history of our Society. The Museum belonged to the Society in those days and was run by it. It was not until the end of this period that the Museum became obviously too big for a small society to run and was handed over to a Board of Trustees of which our present Chairman is a member.

The production of the Journal has always been one of the chief functions of the Society and always a great struggle. What we may think of as the 3rd series, which started in 1971 with No.120, was very successful for three years. This year we have had set-backs, not all financial, as more than one Journal-part was budgetted for. An appeal for help in a recent Bulletin produced volunteers, but we lack the organisation to use their help. Soon you will be considering the choice of next year's Committee. If any of you know fellow mwmbers who have had experience of the publication of scientific papers, do please urge them to allow you to put them forward.

P.M. Allen,
Box 44486,
Nairobi.

- - - - - - - - - - - - - -

NEW MEMBERS

At the October meeting of your Executive Committee it was decided, after lengthy discussion, *not* to raise the annual subscription. It may be recalled that at the March A.G.M. members gave tha Chairman and Committee a mandate to raise subscriptions if and when it became necessary.

Everybody knows that prices are soaring in practically every field - this is a worldwide malady. At the October Committee meeting it was felt that an increase in subscription, although no doubt understandable to members, would nevertheless result in a reduction of renewals for 1975 and would scare off is quite a few new members. The Committee for its part intends to make some economies: the first, you will notice quite soon, will be the change over to wrappers in place of envelopes for the *Bulletin* - this alone will save the Society about £150 a year.

What can you, the Members, do to help? First, we would ask you to try to enrol new members, now is a good time to think about this because next year is not far away and any member joining the Society in November and December can have membership for these months in addition to the whole of 1975. Schools and departments can join as Institutional Members - still at the same price of KShs 50/-. Please try to interest new people to join, every little helps. Another idea is to give friends a year's membership to the Society as a Christmas present, just send the Secretary your friend's names and addresses and Sh.50/- for each one.

Your Committee is planning various publicity campaigns which will be put into effect in the near future but please remember, this costs money, and maybe the return in new subscriptions will not cover the cost of commercial advertising. *Free* publicity is what we need, and that is why we are appealing to you especially. Please do all you can to enrol new members so that we can continue to provide the services we do. Thank you.

Ed.

- - - - - - - - - - - - - - -

LETTERS TO THE EDITOR

Sir,

With reference to Dr Radar's account of the recent field trip to Lake Hannington, I feel I must point out that the new African name for Lake Hannington is Lake Bogoria and *NOT* Baragoi as stated. Baragoi is, in fact, a settlement lying 80 km north of Maralal and north of the El Barta Plains.

Sheila Taylor,
Box 30253,
Nairobi.

Sir,

INLAND OBSERVATIONS OF THE TEREK SANDPIPER

While fairly common at the Kenya coast, the Terek Sandpiper *Tringa terek* appears to occur inland only rarely. The following two records may, therefore, be of interest.

On 5th November 1972, I saw two Tereks at Aruba Dam in Tsavo East National Park. They had been noticed a few days earlier also by Mr C. Smeenk (pers. comm.).

While the above locality is relatively near to the coast, my wife and I were rather surprised to see a Terek Sandpiper at Buffalo Springs in the Isiolo Game Reserve on 12th September 1974. The bird was among quite a varied assembly of waders in the swamp below the actual spring.

Walter Leuthold,
Box 14, Voi, Kenya.

A few Terek Sandpipers have been ringed (and others seen) from time to time in the Kenya Rift Valley lakes; details have not been published but can be abstracted from the files of ringing schedules in the future.

Ed.

OBSERVATIONS ON A BARRED OWLET FAMILY

A family group of five Barred Owlets *Glaucidium capense* was observed over a three-day period near our house at the Miombo Research Centre in the Selous Game Reserve, Tanzania. On 12th January 1974, a fledgling owlet and one adult were seen at dusk. The young owlet could not fly, but hopped from limb to limb. The adult fed the young owlet with a large insect and a nestling bird. The next day two more young owlets appeared as well as a second adult. The adults remained absent during the day, but returned to their young at dusk with insects and two lizards - both skinks. Both parents were seen feeding the three young. On 14th January 1974, the young were making short flights to nearby trees, but were still fed by the adults.

The standard references do not mention birds and lizards as part of the Barred Owlet's diet. Also, since breeding records for the Barred Owlet are somewhat scarce- this note may be of interest to someone studying the species.

Mary Ann Matzke & G. Matzke,
Miombo Research Centre,
Box 23113, Oyster Bay,
Dar es Salaam, Tanzania.

FUNCTIONS

8th/9th/10th November 1974: Lake Baringo Lodge. There is still some accommodation available for this weekend. Cost of accomodation, full board, is Shs.100/- per person per night. Please send in your booking requirements together with cheques to the Secretary as soon as possible, clearly stating which nights you wish to stay. Cheques should be made payable to Lake Baringo Lodge.

Monday 11th November 1974: 5.15. p.m. Lecture Hall, National Museum, Nairobi. Dr C.R. Field, Wildlife Science Dept. of Texas A.M. University will talk on nutritional studies on wild animals in East Africa.

Sunday 17th November 1974: Walk in Katamayu Forest (weather permitting) led by Miss P.M. Allen and Mrs F. Ng'weno. Meet at the National Museum at 9 a.m. when further directions will be given. Distance about 27 km beyond Kiambu. Bring picnic lunch.

Monday 9th December 1974: Talk and slide show on *Mackinder and Mt. Kenya* by Mr John Temple, Vice-Chairman of the Mountain Club. This year is the 75th Anniversary of the first ascent of Mt. Kenya, and Mr Temple has kindly consented to give this talk in connection with the Mountain Club's celebration of this event.

12th - 15th December 1974: Camp at Ol Lolokwe led by Mr F. Hartmann. Further details will be given in the next *Bulletin*.

13th January 1974: Talk and slide show given by Dr G. Irvine, Chogoria Hospital.

- - - - - - - - - - - - - - -

NEW MEMBERS - NOVEMBER 1974

Life Member:

Mr I.W. Hardy, Box 449, Nyeri, Kenya.

Full Members:

Mr M.J. Brookes, c/o British High Commission, Box 30645, Nairobi.
Mr J.H. Burrell, Box 22, Homa Bay Secondary School, South Nyanza.
Dr C.R. Field, Kenya Wildlife Management Project, Box 30559, Nairobi.
Mr Jon Knutzen, Konnerud, Norway.
Dr Jasper Parsons, Medical Research Council Project, Box 1971, Kisumu.
Dr M.D. Purton, Dept. of Vet. Anatomy, Box 30197, Nairobi.
Mr P.W. Ray, British High Commission, Box 48543, Nairobi.
Mr P. de Rham, UNESCO, Box 30592, Nairobi.

Junior Members:

Guy Johnson, Box 49163, Nairobi.
Liersti Allen, Box 30197, Nairobi.

Institutional Member:

University of Queensland, St. Lucia, Queensland, Australia.

- - - - - - - - - - - - - -

SOME RECENT PERIODIC LITERATURE AVAILABLE IN THE LIBRARY

Bebbington, A. 1974 Aplysiid species from East Africa with notes on the the Indian Ocean Aplysiomorpha (Gastropoda: Opisthobranchia). *Zool. J. Linn. Soc.* 54: 63-99.

Bonelli, P. 1971-73 Osservazioni eto-ecologiche sugli Imenotteri aculeati dell'Etiopia. *Boll. Inst. Ent. Bologna* 30: 219-24.

Brown, L. 1974 Saving Lake Nakuru. *Birds* 5: 18-25.

Fain, A. & Zumpt, F. 1974 Notes on three species of Anoetidae, two of which are new, living as commensals or parasites in the ear of an African Buffalo. *Acta. Zool. Path. Antwerp* No. 58: 97-102.

Frame, G.W. & Herbison, L. 1974 The private world of Empakaai. *Wildlife* 16: 210-17.

Gold, Susan 1974 Do-it-yourself safari. *Birds* 5: 26-27.

Hobbs, H.H. 1973 Synopsis of the families and genera of Crayfishes (Crustacea: Decapoda). *Smithsonian Contrib. Zool.* No. 164.

Morrison, M.E. & Hamilton, A.C. 1974 Vegetation and climate in the uplands of S.W. Uganda during the later Pleistocene period. II. Forest clearance and other vegetational changes in the Rukiga Highlands during the past 80 000 years. *J. Ecol.* 62: 1-32.

Reynolds, J.F. 1974 Nursery helps for Bee-eaters. *Wildlife* 16: 256-59.

Schaller, G.B. 1973 A kingdom of predators (Review) *Loris* 13: 121.

Sebald, O. 1973 Die Gattung *Otostegia* Bentham (Labiatae) in Afrika und auf arabischen Halbinsel. *Stuttgarter Beitr. z. Naturkunde* Ser. A. No. 263.

Smith, K.D. 1974 The utilization of gum trees by birds in Africa. *Ibis* 116: 155-64.

QH
7
E135
51

EANHS

BULLETIN

A monthly publication of the East Africa Natural History Society, Box 44486, Nairobi, Kenya. Price 2 shillings

NOTES FOR CONTRIBUTORS

Members of the Society (and non-members) are asked to follow these simple instructions when writing articles or letters for submission to the *Bulletin*. The *Bulletin* is presented each month in a duplicated format: the paper size is 20.5×23 cm (10×8 inches), line drawings can be reproduced but the area should not be more than 17.5×23 cm. Lettering on figures should preferably be in 'Letraset', neatly done in Indian ink or left blank: if the last method is followed, the lettering should be indicated on an overlaying sheet and should not be done on the figure. Figures should be prepared on good quality white writing paper and not on Bristol Board or other thick material. Whenever plants or animals are mentioned the scientific name should also be given but not in parenthesis. Trinomials should not be used unless there is good reason to do so. Author's names of species are not required.

Contributions may be typed (preferably) or written and should be sent to: G. C. Backhurst, Box 29003, Kabete, Nairobi, Kenya. Receipt of contributions will be acknowledged.

EANHS BULLETIN DECEMBER 1974

CONTENTS

Down on the Tana - - - - - - 158
Additions to the Avifauna of Budongo Forest - - - - - - 160
Book Review - - - - - - 161
Accidental death of a bat - - - - - - 162
White-eyed Pochard at Marsabit - - - - - - 163
Bittern in Nairobi National Park - - - - - - 163
Saiwa Swamp and Mt. Elgon - - - - - - 164
Letters to the Editor - - - - - - 165
Nutritional studies on wild animals in East Africa - - - - - - 166
A congretation of butterflies - - - - - - 167
Hannington to Baringo the hard way - - - - - - 168
Record Review - - - - - - 169
Requests for information - - - - - - 170
Hon. Treasurer - - - - - - 171
Functions - - - - - - 171
New members - - - - - - 172

DOWN ON THE TANA

The first fortnight of May is an excellent time in this fascinating valley, and, ecologically, the 1000 m level is most interesting.

The rains have fallen and the country is a glorious compound of pale blue skies, dark blue Ukamba hills in the distance, light green on the land nearer by, and the red soil, with the even redder Tana flowing rapidly through its rocky bed. Temperatures are seldom over 85 in the shade, and bird life is very vigorous. Flowers abound.

The Sparrow Weaver *Placepasser mahali* are certainly the most continuously noisy - their breeding and roosting sites are everywhere, particualary near human habitation. They appear to build far more nests than they require, but the Superb Starling *Spreo superbus* occupy the vacant places at night.

Parrats, Psittacidae, are of special interest, and the Orange-bellied *Poicephalus rufiventris* give us much pleasure. One pair regularly roosts in a hole in a Baobab tree not far away. This same hole was a source of interest during the day to a pair of Grey-headed Sparrows *Passer griseus*, Ruppell's Long-tailed Starling *Lamprotornis caudatus*, Lilac-breasted Roller *Coracias caudata* and Wood Hoopoe *Phoeniculus purpureus*.

Our Parrot pair mated in a nearby thorn tree, in which our main interest was a nest being built by a pair of White-headed Buffalo Weavers *Dinemellia dinemelli*. The approach of the cock parrot to his waiting hen was most gracious and gentle, and, during the act, which was very prolonged, the hen repeatedly turned her head to look up at the cock, and immediately received what appeared to be a regurgitated seed on every occasion.

One is always impressed by the size and thorniness of the Buffalo Weaver's *Bubalornis albirostris* nesting materials. Twigs of up to 450 mm in length, armed with ferocious thorns, are vibrated into position. It would not be easy to rob such a nest - yet, one morning sitting at breakfast, we witnessed the most determined and systematic destruction of one such nest by an immature Harrier Hawk *Polyboroides radiatus*. Testing place by place, until he found a weakness, this young bird, ignoring the mob of distressed smaller birds, tore the huge nest to pieces, mainly using claws. The nest is now deserted.

A call that has long mystified us has been identified - 'wee-oo wee-oo wee-oo', rising to a climax, and then falling off again, and heard as much by day as by night. At midday recently a mob of small birds was seen in the bush to which this call had been traced. Here, in the centre, was a rather bewildered looking Pearl Spotted Owlet *Glaucidium perlatum*. Similarly, a most explosive kind of 'cow' - a mixture of bark and cough, was traced to a magnificent Bateleur Eagle *Terathopius ecaudatus* down in the valley. He slowly lowered his head, hunched his shoulders, and, with a sudden thrust, gave vent to this most unexpected call.

The nest cleaning methods of parent birds are interesting. Bulbuls *Pycnonotus barbatus*, for instance, seem to swallow the faecal sac right there.

White-eyes *Zosterops senegalensis*, and Glossy Starlings *Lamprotornis chalybaeus* carry the sac away and drop it at a distance.

That fascinating Barbet - d'Arnaud's *Trachyphonus darnaudii* living 45 - 60 cm down a vertical shaft in the ground, does a regular mucking out about once an hour. Normal feeding visits - squashy bugs and berries, lizards etc. take no longer than 7 seconds in all. Anything longer - and it may be 30 - 45 seconds - means a clean-up is in progress. Parent eventually emerges with a huge beakful of dark brown debris, with which, after a careful look round, he or she flies off and drops at a distance.

Casualties amongst breeding birds always appear very high. Checking nests regularly for the Society's Nest Record Scheme emphasises this. Of 11 nests this fortnight, 30% are certainly unsucessful. Amongst non-breeding birds I am impressed how frequently one sees Pied Wagtails *Motacilla vidua* with an absent or deformed foot, but imagine our surprise recently when a Nubian Woodpecker *Campethera nubica* dropped from a tree and hopped frantically into cover with a broken wing. Equally distressing was the sight of a Yellow-billed Stork *Ibis ibis* vainly trying to pluck off the foot of his left leg, fractured near the joint and held on only by the tendon.

One wonders whether those birds which appear to enter into a relationship with hornets do so from a basic sense of need for protection. Our resident Striped Swallow *Hirundo abyssinica* and Little Swift *Apus affinus* do this - as do Cordon-bleu *Estrilda bengala* nesting on a cliff edge nearby.

Talking about mutually beneficial relationships - two are very clear down here. In dry weather the Ground Squirrel *Xerus erythropus* spends a considerable amount of time digging in the stony ground for edible material. The moment such a dig begins, a Red-billed Hornbill *Tockus erythrorhynchus* floats down to attend, and eagerly snaps up insects exposed, which would normally be beyond his powers of digging. Such a dig might be attended by two hornbills simultaneously.

Of sinister significance is the recent appearance of much larger numbers of Red-billed Oxpeckers *Buphagus erythrorhynchus* accompanying the huge herds of be-ticked, hump-backed cattle moving into and degrading this area.

During non-breeding seasons bird photography is not so simple as at the nest, since there is no certain spot to meet the bird. But observation suggests that some birds utilise, fairly regular circuits and can reasonably be expected to appear at certain points in the course of this circuit. This is certainly so in the case of d'Arnaud's Barbet, the Blue-naped Mousebird *Colius macrourus*, as well as the Crakes and Rails, Rallidae.

To end with - the big excitement of the visit - in the fading light on a bare branch overlying still water - a long pointed, orange-red bill, red feet, set far back; a longish tail; spotted white on dark back and a whitish streak from the eye down to the neck. As we drew near the bird slipped awkwardly from the branch and hurried rapidly away over the water to the safety of a nearby reed bed, where it swum like a low-lying grebe - thus proclaiming itself to be the rarely seen Peter's Finfoot *Podica senegalensis*.

G. & D. Irvine,
Chogoria Hospital, P.O. Chogoria,
via Meru, Kenya.

ADDITIONS TO THE AVIFAUNA OF BUDONGO FOREST, UGANDA

Unfortunately in their comprehensive and informative paper on "The Birds of Budongo Forest, Bunyoro Province, Uganda" H. Friedmann and J.G. Williams (1973) overlooked the report by J.L. Peters and A. Loveridge (1942) entitled "Scientific results of a fourth expedition to forested areas in East and Central Africa. II Birds" in which 27 of the 246 species dealt with were collected in the Budongo Forest between 22.xi - 7.xii.1938 by the junior author.

Consequently, to the 226 forms listed by Friedmann and Williams as occuring in the forest, may be added:

Tockus fasciatus (as *Lophoceros fasciatus* in Peters & Loveridge, 239).

Prinia subflava melanorhyncha (as *P. m. immutabilis* in P. & L., 255).

Motacilla flava thunbergi (as *Budytes f. thunbergi* in P. & L., 260).

while comments on the following are incorrect, *viz.*

Turaco schuetti emini p.4 F & W., *not* "known only . . . " as I shot one male and two females.

Ceuthmochares aereus aereus p.5, *not* "first reported by . . . " as I shot a male.

Bycanistes subcylindricus subquadratus p.6, for I collected a skull of a female though the subspecific name was omitted.

Neocossyphus rufus gabunensis p.11, *not* "first reported by . . . " as a female under the name of *N. r. arrhenii* is recorded by P. & L. on p251.

If *Ploceus cucullatus femina* of P. & L., p.269 is identical with *P.c. bohndorffi* p.15 F. & W., then it is *not* "Known only on the basis of van Someren's record" as I collected two males and one female.

In conclusion, I wish to thank Dr R.A. Paynter, Jr., Curator of Birds at the Museum of Comparitive Zoology, Harvard, for his kindness in carefully checking the numerous nomenclatorial changes that have inevitably occurred during the 30 years that elapsed between publication of the two papers.

Arthur Loveridge,
St. Helena Island,
South Atlantic.

REFERENCES:

Friedmann, H. & Williams, J.G. 1973. *Jl E. Africa nat. Hist Soc. Nat. Mus.* 141: 1 - 18.

Peters, J.L. & Loveridge, A. 1942. *Bull. Mus. comp. Zool. Harv. Coll.* 89: 217 - 275, pls. i - iii.

- - - - - - - - - - - - - - -

REVIEW

A GUIDE TO THE SNAKES OF UGANDA, Revised Edition, by Capt. Charles R.S. Pitman Codicote: Wheldon & Wesley Ltd. 1974. Pp. xxii + 290, copiously illustrated in colour and black and white; 19 x 25.5 cm. Price £12.00 post free from the publishers, Lytton Lodge, Codicote, Hitchin, Herts, SG4 8TE, England.

The revised edition of "A Guide to the Snakes of Uganda" by Capt. Pitman is a most welcome contribution to a fascinating and sometimes controversial subject. Mythology has formed much of the knowledge of snakes. Fear is still the first reaction by man and beast alike. However, this book has most successfully consolidated all the scientific practical information and knowledge of the snakes of East Africa with particular reference to those of Uganda.

The contents have been exceedingly well outlined which enables the reader to identify his or her interests immediately. In addition to the genera and species found in the area involved, useful information on the physiology, habits, diets, diseases and predators is included as well as precautions that should be taken in the event of an unexpected meeting with a snake!

The coloured illustrations are magnificent which, coupled with the excellent line drawings should enable any species defined to be identified very readily. The photographs are also of a very high standard. The text is extremely comprehensive, the bibliography is extensive and the indexes are grouped into technical, popular, vernacular and general classifications. This facilitates considerably the searching that may be required by both the scientist and the layman.

The "staccato" style of English has been used throughout and initially may be difficult to accept. However, once the reader has become accustomed to the style then the format is readily acceptable. In general, the book is a very valuable addition to the knowledge of the fauna of East Africa by a longstanding and eminent member of the East Africa Natural History Society. The volume is clearly printed and well bound for which the publishers deserve full credit. Although it is not a handbook, it is a reference publication that every naturalist should have in his library.

JGT.

- - - - - - - - - - - - - - - -

ACCIDENTAL DEATH OF A GREATER LONG - FINGERED BAT
MINIOPTERUS INFLATUS THOMAS 1901

We received a male *Miniopterus inflatus* (SMF 43660) from Baharini Farm, Lake Nakuru, which was found on 22.v.1972 impaled on a barbed wire fence near the margin of Acacia forest. As long-fingered bats of the genus *Miniopterus* are strong fliers, this kind of accident may be explained either by delayed reaction in avoiding an obstacle while hunting or by a sudden wind blow.

From other areas where *Miniopterus* occurs, the same events are reported. Spate (1972) found several *M. schreibersi* in barbed wire fences after a prolonged windy spell, and Dwyer & Hamilton-Smith (1965) found bats of the same species impaled on thorns of a bush very close to a cave entrance, which the bats had to pass.

Other bat species face similar deaths as summarized mainly for New World species by Manville (1963) and Gilette & Kimbrough (1970). Apparently, this kind of accident has not yet been observed in Africa before.

Dieter Kock,
Forschungsinstitut Senckenberg,
D 6000 - Frankfurt a.M.
Senckenberg-Anlage 25, Germany.

REFERENCES:

Dwyer, P. & Hamilton-Smith, E. (1965) Other accidental deaths. *Austr. Bat Res. News* 3:4.

Gillette, D.D. & Kimbrough, J. (1970) Chiropteran mortality. In: Slaughter, B. & Walton, D.W.: *About bats, a chiropteran symposium.* Southern Methodist Univ. Press, Dallas.

Manville, R.H. (1963) Accidental mortality in bats. *Mammalia* 27:361-366.

Spate, A. (1972) Accidental deaths in *Miniopterus*. *Austr. Bat Res. News.* 11:2.

MELANISTIC SERVAL CATS

A.D. and R.M. Irvin's notes in November's *Bulletin* prompts me to write the following:

Between the 18th and 21st October, 1974 I observed five servals *Felis serval* in the Aberdare National Park in five different localities, separated by several kilometres but all above 2800 m. Four of these five were of the all black melanistic form. Williams states: "All black melanistic examples are not infrequent, especially in high country in Kenya" and of the Aberdares "melanistic examples are sometimes seen".

I wonder, is the melanistic form more common in the Aberdares than the spotted version?

On 14th August, 1974 I saw another melanistic serval at the foot of Ol Lolokwe near the Isiolo - Marsabit road. I tried to approach this cat on foot, hoping for photographs, and got to within 30 m before it made off, alas too quickly for me.

One of those observed in the Aberdares was seen to pounce on a small animal near a burrow, probably a Kenya Mole Rat, before disappearing into the montane grasses.

D.K. Jones,
Box 30253,
Nairobi.

WHITE - EYED POCHARD AT MARSABIT

The White-eyed Pochard or Ferruginous Duck *Aythya nyroca* is a rare bird in Kenya to the extent that Backhurst *et al.* (1973) could list only six records, mostly from the Rift Valley lakes.

We visited the Marsabit lakes in Kenya on 22nd April, 1974 and, together with parents Mr and Mrs W.G. Harper, observed a drake White-eyed Pochard on Lake Paradise together with several African Pochard *Netta erythropthalma*, Hottentot Teal *Anas hottentota* and one White-backed Duck *Thalassornis leuconotus*. The following diagnostic features of the White-eyed Pochard were noted: rather like the European Pochard *Aythya ferina* in size and shape and with the chestnut head and neck, but mantle and wings medium brown; white under tail coverts; white bar on wings, more obvious when they were opened; white eye quite striking in the good light at the time of the observation.

John and Lyn Harper,
Box 547,
Kericho, Kenya.

REFERENCE:

Backhurst, G.C., Britton, P.L. & Mann, C.F. (1973) The less common Palaearctic migrant birds of Kenya and Tanzania. *Jl E. Africa nat. Hist. Soc. & Nat. Mus.* 140: 1-38.

A BITTERN IN NAIROBI NATIONAL PARK

A Bittern *Botaurus stellaris* was seen by my wife and myself on 31st October 1974 at approximately 1600 h in the Nairobi National Park.

The individual bird was seen whilst it was stalking through open, shallow water on the edge of the Omanayi dam.

It presented a perfect showing of itself, allowing its identification to be established by being on view for nearly ten minutes. I was viewing it through 10 X 40 binoculars at a range of some 50 m.

C.E. Norris,
Box 42406,
Nairobi.

- - - - - - - - - - - - - - -

A VISIT TO SAIWA SWAMP AND MT. ELGON NATIONAL PARK

My wife and I decided to pay a camping visit to Saiwa Swamp and then on to the Mt. Elgon National Park over the weekend of 20th - 22nd September, 1974. We had never visited either of these areas before and decided to see them so as to be able to plan a more prolonged visit later on.

We had the description in the May 1972 number of the *EANHS Bulletin* to guide us with regard to Saiwa Swamp. We had no difficulty in finding it and set up camp in good time on arrival. We were surprised to see the smallholder development all round the swamp and wondered if this would have any effect on the Sitatunga *Tragelaphus spekei* or on the bird life. However, we were soon reassured for as we climbed onto one of the observation platforms on the edge of the swamp, several Sitatunga were to be seen. We were surprised at the colouration, having expected the males to be dark chocolate brown in line with the illustration in John Williams' second field guide. Instead they were a shaggy light brown or fawn colour and this was borne out by the description in the book 'Larger Mammals of Africa'. We had a very good view of the Sitatunga, both in the evening and the following morning, and in particular observed the foot formation which is peculiar to these animals.

We also found Saiwa Swamp an excellent place for bird watching, and while we saw quite a number of the larger spectacular birds, perhaps the most interesting were the Little Rush Warblers *Bradypterus baboecola* which were seen from the observation platforms. These little birds were making their characteristic twittering calls alternated with loud wing flapping as they moved from rush to rush. In the evening and the following morning we identified over 40 species of birds and I have no doubt that a more prolonged visit would produce a bird list of over a hundred species.

We left Saiwa Swamp and drove over to the Mt. Elgon Park through Kitale and arrived at the Park Gates at noon. The entrance gate is a most elaborate building, with beautifully produced signboards which augured well for the Park, but I am afraid that the roads did not live up to this expectation. In frequent places there were deep water-filled holes in the road which necessitated the use of four-wheel drive and would have definitely precluded two-wheel drive vehicles.

The Park gates are at 2300 m and in over 26 km we climbed to over 3500 m before coming to grief in a particularly bad morass which was caused by a running stream crossing the road. Digging ourselves out with the help of a hi-lift jack took three hours and we had to settle for camping at the right side of the road.

It was extremely cold in the night with ice on our washing water and frost on the ground. However, the peaks and rim of the crater were seen in brilliant sunshine the next morning, and we also enjoyed examining the flora. There were signs of many elephant and buffalo on the way up and down the mountain, although none was actually seen. We did see Colobus and Blue Monkeys, *Colobus polykomos* and *Cercopithecus mitis* as well as a dark Bush Pig *Potamochoerus porcus.* In the night some small creature ate our two tablets of soap which was a relief, as from the noise it made we thought that our bread had probably disappeared.

Both spots are very well worth visiting and need longer than a one night stop to fully enjoy their amenities. We would recommend at least two nights at Saiwa Swamp if bird watching is intended, and two to three nights on Mt. Elgon to include a walk up to the top and time to examine the caves and other points of interest. The installation of a number of culverts in the tracks on Mt. Elgon would do a lot of good and it is to be hoped that the Warden will be doing something about this in order to open up the Park to more vehicles.

L.A.S. Grumbley,
Box 42011,
Nairobi.

- - - - - - - - - - - - - - -

LETTERS TO THE EDITOR

Sir,

Referring to the article by John and Lyn Harper in the October issue of the *Bulletin*, in which they describe hearing the Chiffchaff *Phylloscopus collybita* singing in the Cherangani Hills, I would like to add another record, so far unpublished.

This record was supplied to me by Dr W.R. Burkitt, who I hope will not mind my quoting from his letter of 2nd October 1967, as follows:

"I was recently looking through your article in the *J.E.A.N.H.S.* of June 1966 (on the birds of Mau Narok) and was most interested to see your note on the Chiffchaff. I used to be pretty au fait with the songs and calls of most British birds; imagine my surprise in November 1965 when walking at about 8000 ft. in Cherangani Hills, I heard a Chiffchaff in full song high up in the trees above me".

I subsequently had the privilege of meeting Dr Burkitt, and had no doubt this was a positive and reliable record; especially interesting is that the bird was singing in November.

Mr C.W. Benson also referred to the same paper in the *Journal* of July 1968 describing how he heard the Chiffchaff singing on Mount Elgon at 4000 m, and

Backhurst *et al.* correctly state that it is probably a regular winter visitor to this country. Mr A.J. Deane told me he saw and heard it at Tree Tops, Nyeri, two years ago and I have found it a regular visitor to Mau Narok.

P.H.B. Sessions,
P.O. Mau Narok.
Kenya.

REFERENCE:

Backhurst, G.C., Britton, P.L. & Mann, C.F. (1973) The less common Palaearctic migrant birds of Kenya and Tanzania. *Jl E. Africa nat. Hist. Soc. Nat. Mus.* 140: 1-38.

Sir,

Reference Vera Bowles article in the September *Bulletin*. I have no doubt that Starred Robins breed in the forest adjoining our property here, on the Ngong Road. They come daily to our bird baths and last year, I think it was June or July but did not record it, they were accompanied several times by a young bird.

If anyone is interested in seeing Lemon Doves in comfort and at reasonably close quarters, they are welcome to come and see them on our bird bath any evening from 5 p.m. till dark. We have had as many as six at a time and they are very beautiful when the light catches their pink napes. But they only come in the dry weather.

D.M. Sheppard,
Box 24630,
Karen.

- - - - - - - - - - - - - - -

NUTRITIONAL STUDIES ON WILD ANIMALS IN EAST AFRICA

Members who attended Dr C.R. Field's lecture on 11th November were given an insight into the difficulties of this particular kind of research, illustrated by a most interesting film. Dr Field was investigating the hypothesis, guess, "law", call it what you will, that no two species can occupy the same ecological niche at the same time. Most of the work he described was done in the Queen Elizabeth (Ruwenzori) National Park in Uganda, and the film was made there. In this park many species of animals appear to be grazing or browsing together. The worker's task is to find out if they are actually eating the same plants.

Dr Field told us of several methods. You can observe animals in the wild and actually see what they are eating. The film showed Topi grazing and lifting their heads with the flowering ends of grasses sticking out of their mouths. The animals in Q.E. Park are very friendly and permit a near approach. Even so the worker's life cannot have been without thrills. One part of the film showed him apparently only a few yards from a cow elephant and her small calf, and his position seemed all the more hazardous as his eyes were often on his notebook instead of being concentrated on the flapping ears and waving trunk of his subject, who it must be admitted showed little sign of disturbance.

Tame animals can also be used. Part of the film showed two young buffale that Dr Field had brought up and which followed him everywhere, even running after his Landrover. In turn he followed them and noted what food plants they selected. When animals were being thinned out, as the Hippo were, it was of course possible to take samples of the actual stomach contents.

It is a special privilege for members to hear this kind of lecture - an account by a fellow member of original work in which he is himself engaged. We hope that Dr Field will speak to us again before long and tell us of the work at Akira Ranch and other places and what conclusions are being reached. The work of course bears on the important practical question of whether some other species of herbivore may not be more suitable for ranching in certain habitats than cattle.

P.M.A.

- - - - - - - - - - - - - - -

A CONGREGATION OF BUTTERFLIES

Towards the end of October, 1974 a short visit was made to the Witu Forest to collect butterflies for the Museum. This forest is almost continuous from Garsen to beyond Witu.

A large number of specimens of the Novice Butterfly *Amauris ochlea* were seen. The butterflies of this genus are usually solitary, only congregating at damp patches. It was a great surprise, therefore, to see large groups of from twenty to fifty individuals in a small area. They were congregated on small plants and creepers above them. These groups were about 3 - 4 m across and 20 - 30 m apart in several groups together, then none for half a kilometre or so.

While collecting, I passed from one patch to another and the butterflies from the near one would all fly up and flap around slowly, displaying their black and white "distasteful" colouration. They settled as soon as the disturbance had passed. One or two flew along to the next group and disturbed them well before I could get near them.

I have only one other record for Africa of Danaids congregating like this, and that was from the Kalahari Gemsbok National Park in South Africa. In this record, Van Son has this to say, referring to the African Monarch *Danaus chrysippus* : "On very warm days, with temperatures well over 100. F, this species was observed to congregate in large numbers in the shade of the camel thorn trees, where the butterflies sat motionless on dry branches and grass stems, apparently stunned by the heat and most unwilling to fly".

Mr J. Kielland, who has collected extensively in Tanzania, has seen this butterfly in the forests around Dar es Salaam and has noticed the same congregating phenomenon.

M. Clifton,
Entomologist,
Nat. Mus., Box 40658,
Nairobi.

REFERENCE:

Van Son, G. (1959) *Koedoe* 2:59.

HANNINGTON TO BARINGO THE HARD WAY

Inspired by the recent EANHS trip to Lake Hannington, a friend and I decided to try the direct route from this lake to Lake Baringo. Armed with the 50,000 series maps of the area we set out to follow the C.713, as the road was confidently designated. For transport we were using motorcycles, which turned out to be exactly the right vehicles for the trip.

For those who would like to try the run, I append a few extracts from my notebook, but would stress at the outset that only four wheel drive vehicles with a fairly experienced driver would be able to get through.

The track is found as a left turn only a few metres before the barrier at which one pays to enter the Lake Hannington area. It appears to be a small riverbed, but on closer investigation some signs of old grading appear, if still in doubt the keeper of the gate will point it out. Once going in the right direction the road is fairly easy to follow, the double line of worn earth being reasonably conspicuous. The first 4 km is along smooth ground at the base of the Rogeti range of hills. The going is deceptive, as suddenly the track vanishes into a gorge, the sides of which fall steeply some 7 m to the Loboi river below. While we were on the track, it was successfully negotiated by a Unimog, including this crossing of the Loboi river, which is certainly the most difficult obstacle on the journey.

Once on the far bank of the river, the track turns sharp left and then right, gradually becoming easier to follow, and fairly smooth as far as the Maji Ndege area, some 5 km further on. Here there is a steep and very rocky escarpment, its only consolation being the magnificent view down along the rift with Baringo a brown streak on the horizon.

Having descended the scarp, a right turn is made at the 'T' junction, to head into Loboi, taking the left turn instead puts one onto the road to Marigat. Shortly after the turn the road goes through two fords, both quite shallow with firm sand under the water, and the road is clearly marked into Loboi. This village has some shops and a Government office. The road passes on the left of the office and continues well marked along the base of the Chebinyiny range of hills

Once past the hills the road vanishes as the ground rises towards Sandai. This is fairly open country, lightly treed, with a number of huts dotted over a wide area. Nowhere is the road visible, but on the right a long range of hills straggles northward towards the Ng'arua swamp. The track resumes at the point where swamp and hills meet, and from there goes through a belt of wait-a-bit thorn to Logamukum.

Here there is a shop which sells, among other goodies, Coca-Cola. Never was a Coke better timed! This is the point to take stock, as it is here that one must decide which bank of Lake Baringo one wishes to visit. Turning left out of Logumukum leads to Marigat and thence the west bank, turning right to Loiminange and the east bank. Between the two lies the Oloimatashu swamp through which there are no tracks.

We decided to head east, and took the well marked road to Loiminange. From there we followed a cattle track across the Ol Arabel river and up to a headland overlooking Lake Baringo. We skirted several boulders and rode across tussocky grass to the lake's edge, stopping suddenly as we ran into swampy ground.

Six hippo were cavorting at the water's edge, and we watched them as we ate our lunch.

Granville Davies,
Box 49813, Nairobi.

- - - - - - - - - - - - - - -

RECORD REVIEW

BIRDS OF THE AFRICAN RAIN FORESTS 1971.

Recorded by Stuart Keith. Produced by Stuart Keith & William W.H. Gunn. Published by the Federation of Ontario Naturalists and the American Museum of Natural History.
Two long-playing (33.3 r.p.m.) records. Nairobi price Shs. 135/-

Thanks to the Society's Chairman, Stuart Keith's long-awaited records are now available in this country. Members of the E.A. Natural History Society who produce valid membership cards at 'Quintessence', Box 42343, Nairobi, (at the Thorn Tree, New Stanley Hotel) will get a 10% discount.

Stuart Keith spent three years accumulating these recordings of 92 African forest birds; only 9 are duplicated in Myles North's two records. The reproduction is meticulously done and nobody who has any interest in African birds should be without these records. Many 'mystery voices' of our forests here lose their mystery. From the scientific viewpoint, too, the serious worker will find extremely valuable comparisons, as, for example, the three long-tailed cuckoos *Cercococcyx* spp. which are virtually impossible to distinguish in the field - but listen to their voices!

Stuart Keith wrote to me in 1971: "I believe that cut I (song) of *Muscicapa griseigularis* is in fact one of the songs or calls of *M. caerulescens* (the Ashy Flycatcher). I also now think that the song and call given as that of the Brown Illadopsis are in fact made by the Pale-breasted Illadopsis *Trichastoma (= Malacocincla) rufipennis*. The two birds are extremely hard to tell in the field, but I come to this conclusion after extensive field experience with both species in Liberia this year. The Brown Illadopsis has a song similar in general form to that of the Pale-breasted but with some distinct differences."

The last band comprises an evening chorus of birds in the Sokoke Forest and various nocturnal mammals including chimpanzees.

The jacket is very attractive and has copius notes on each species with exact locality and date of recording.

The ideal Christmas present!

ADFW.

- - - - - - - - - - - - - - -

REQUESTS FOR INFORMATION

Between April 1973 and October 1974 I have been working on the wading birds of Aldabra, British Indian Ocean Territory, and as part of this work I have colour ringed 97 turnstone *Arenaria interpres* and 74 Crab Plovers *Dromas ardeola*.

I feel it is likely that the birds I have marked may turn up on the East African coast and it is possible that they may be seen by ornithologists there.

The colours may fade on the rings, making the combinations difficult or impossible to read even at close range, but if the combination can be read the following is important; which leg is the metal B.T.O. ring on, what colours are on each leg and if two rings are on the same leg which ring is uppermost. Even if the rings cannot be seen well it would be extremely important to know where and when the bird was seen, without knowing the combination.

In the case of the Crab Plover, the rings can be removed by the bird, so no attempt need be made to read the combination as it will be unreliable.

Any sightings of these colour-ringed birds would be extremely useful, and information should be sent to the address below.

J.R. Wilson,
23, South End,
Bedale, Yorkshire,
England.

MARINE SCIENCE SURVEY

The coral reefs along Kenya's coast have received very little scientific attention despite the wealth of life they support. Knowledge of the reefs is important for the development of commercial fisheries and for monitoring the effects of water pollution. Areas that have been designated or proposed as Marine National Parks require study to provide information for effective management and education programs.

There is a definite need for coordination of marine research efforts in Kenya, where so few scientists are available to work on the many problems. Towards this end, I am attempting to compile a directory of marine scientists and their research projects in Kenya, to be published in this *Bulletin*. It is hoped to include visiting as well as resident investigators, and projects in physical as well as biological sciences.

I should greatly appreciate receiving the following information about persons engaged in or planning such research: name, address, professional affiliation, title of project and dates of project.

Richard L. Jachowski,
Department of Zoology,
University of Nairobi,
Box 30197, Nairobi.

- - - - - - - - - - - - - - -

HON. TREASURER

Owing to staff changes at the Museum, it is only too likely that our Hon. Treasurer will be leaving after the A.G.M., and we shall have to find someone else from amongst us to do this important work for the Society. It should not be a hard task for anyone familiar with keeping accounts. Perhaps once a week he (or she) must contact the Secretary and collect bills for payment and cheques to be paid in (postage of course is paid by the Society). Once a month he must attend the meeting of the Committee, give an account of the financial position and contribute his share of ideas to the running of the Society. Once a year he must prepare the financial statement and balance sheet for the A.G.M.

Our Committee cannot know all the members personally. Necessarily they are obliged to mill round in the perhaps narrow circle of their own friends and acquaintances. If we are to see new faces in Committee the Society itself must help. I know people often do not like to volunteer; but members know each other, their capabilities and opportunities, and it is for them to persuade a suitable person to allow himself (or herself) to be put forward.

Hon. Sec.

- - - - - - - - - - - - - - -

FUNCTIONS

Monday 9th December 1974: Talk and Slide show on *Mackinder and Mt. Kenya* by Mr John Temple, Vice-Chairman of the Mountain Club. This year is the 75th Anniversary of the first ascent of Mt. Kenya, and Mr Temple has kindly consented to give us this talk in connection with the Mountain Club's celebrations of this event.

12th - 15th December 1974: Camp at Ol Lolokwe - details on application.

Saturday 14th December 1974: Marine Life Field Trip led by Mrs Fleur Ng'weno. Meet at the Coraldene Beach Hotel, Bamburi, at 9 a.m. Please wear tennis shoes or boots and be prepared to wade. The purpose of the trip will be to explore the rich plant and animal life in the tidepools in the old reef near the shore. Identification will be basic and no previous study is required, but pencil and paper will be useful. (For those wishing to stay on for the afternoon, Coraldene offers reasonable a la carte meals).

Sunday 15th December 1974: For non-campers - A "Dudu Crawl" led by Mike Clifton, a day walk on Mr Jack Hopcraft's farm at Athi River. Meet at the National Museum at 9 a.m. and bring picnic lunch.

Monday 13th January 1975: Talk and slide show by Dr G. Irvine.
11th/12th January 1975: Weekend visit to Ngobit Estate, Naro Moru. Details later.

Wednesday morning birdwalks continue to meet at the National Museum, Nairobi each wednesday at 8.45 a.m.. Please note that there will be *no* birdwalk on 18th and 25th December. There *will* be a birdwalk on 1st January - a good way to start the new year! These walks are primarily for beginners, and all new members are welcome. Children are welcome as long as small children are supervised.

NEW MEMBERS - DECEMBER 1974

Life Member:
Mr J.S. Karmali, Box 42202, Nairobi. (Change of membership status).

Full Members:
Dr E.W. Arnold, Biology Dept., Wanatchee Valley College, Washington State 98801, U.S.A.
Miss P. Ashcroft, Thika High School, Private Bag, Thika, Kenya.
Mr C. Belfrage, Box 42970, Nairobi.
Miss J. Chapman, Box 14601, Nairobi.
Miss C.J. Elkins, Box 43436, Nairobi.
Mr L.J. False, S.R.I. P.O. Seronera, via Arusha, Tanzania.
Mrs L. Greenham, c/o Provincial Hospital, Box 29, Garissa, Kenya.
Miss C. Hesketh, Kenya Polytechnic, Box 30214, Nairobi.
Mr R.J. Hine, Kenya Polytechnic, Box 30214, Nairobi.
Mr E.S.R. Humphries, Kenya Polytechnic, Box 30214, Nairobi.
Mr P. Lack, Tsavo Research Project, Box 14, Voi. Kenya.
Mrs A. Morton, Box 42011, Nairobi.
Mr and Mrs J.G. Powys, Box 38, Rumuruti, Kenya
Dr Glenn D. Prestwich, I.C.I.P.E., Box 30772, Nairobi.
Mrs R. Sanderud, c/o Faculty of Education, Box 30197, Nairobi.
Mrs T.M. Smith, Box 40751, Nairobi.
Mrs J. Stonehouse, c/o Kenya Shell, Box 43561, Nairobi.
Dr R.J. Tatchell, UNDP, Box 9182, Dar es Salaam, Tanzania.

THE EAST AFRICAN NATURAL HISTORY SOCIETY

Chairman: J. S. Karmali

Vice Chairman: Mrs J. Hayes

Editor, Jl E. Africa nat. Hist. Soc. Nat. Mus.: Dr P. J. Greenway O.B.E.

Secretary: Mrs D. Collins

Librarian: Miss P. M. Allen

Treasurer: M. P. Clifton

Executive Committee (in addition to the above): Miss D. Angwin; G. C. Backhurst (*Ringing Organizer* and *Editor EANHS Bulletin*); Mrs A. L. Campbell; A. D. Forbes-Watson; R. E. F. Leakey; E. T. Monks; N. Myers.

Co-opted Members: Mrs H. A. Britton (*Nest Record Scheme Organizer*); N. Chumo; A. Duff-MacKay; D. Mbuvi; T. D. Morris; Mrs L. Ndegwa; Mrs F. Ng'weno; Mrs I. Preston.

The Journal Editorial Sub Committee consists of Dr Greenway, Miss Angwin, G. C. Backhurst, M. P. Clifton, A. D. Forbes-Watson and Mrs Hayes.

MEMBERSHIP

This offers you free entry to the National Museum, Nairobi; free lectures, films, slide shows or discussions every month in Nairobi; field trips and camps led by experienced guides; free use of the joint Society-National Museum Library (postal borrowing is also possible); reciprocal arrangements with the Uganda Society's Library in the Uganda Museum, Kampala; family participation: wives and children of members may attend most Society functions; one copy of the *EANHS Bulletin* every month; a copy of each *Journal* published during your period of membership; the Society controls the ringing of birds in East Africa and welcomes new ringers; the Society runs an active Nest Record Scheme; activities such as plant mapping and game counting are undertaken on a group basis. Membership rates are given at the foot of this page.

JOURNAL

The Society publishes a leading and highly respected scientific journal—*The Journal of the East Africa Natural History Society and National Museum.* Each issue consists usually of one paper, however, sometimes two or more short papers may be combined to form one number. The aim of this method of presentation is to ensure prompt publication of scientific information; a title page is issued at the end of each year so that the year's papers may be bound together. Contributions, which should be typed in double spacing on one side of the paper, with wide margins, should be sent to the Secretary, Box 44486, Nairobi, Kenya. Authors receive twenty-five reprints of their article free, provided that these are ordered at the time the proofs are returned.

E.A.N.H.S. BULLETIN

This is a duplicated monthly magazine which exists for the rapid publication of short notes, articles, letters and reviews. Contributions, which may be written in clear handwriting or typed, should be sent to the Editor (*EANHS Bulletin*), P.O. Box 29003, Kabete, Nairobi, Kenya. Line drawings will be considered if they add to the value of the article, photographs cannot be published.

MEMBERSHIP SUBSCRIPTION RATES

Life	One payment: K shs.	500/-
Institutional (schools, libraries) .	annual payment: K shs.	50/-
Full	annual payment: K shs.	50/-
Junior (full-time student, no *Journal* supplied)	annual payment: K shs.	10/-

Subscriptions are due 1st January. From 1st July you may join at half the yearly rate and receive publications from that date. Application forms for membership are obtainable from the Secretary, Box 44486, Nairobi.

QH
7
E135
SI
NH

EANHS BULLETIN INDEX 1974

Editorial, Secretarial, & miscellaneous notes & announcements:

- Advertisements 61
- A.G.M. 26
- Corrections 33, 75
- For Sale 11, 110
- Forest destruction 102
- Geographical Association 124
- Important Notice 11
- Library: Notices 26, 61, 86, 109, 124, 136, 151
  - Recent Periodic Literature available in 12, 27, 45, 126, 155
- Membership: Recruiting new Members 125, 152
- Nest Record Scheme 20, 21, 37
- New Members 28, 46, 64, 76, 88, 100, 125, 142, 155, 171
- Notices 28, 62, 75, 76, 95, 171
- Photographic Exhibition 28
- Requests for Information & Wanted 10, 61, 62, 84, 86, 170
- Society Functions 10, 26, 44, 61, 76, 88, 100, 110, 125, 141, 154, 171
- Theft 124

AUTHORS

- A.D. F-W. Birds of the African Rain Forests (Record Review) 169
- Allen, J.A. Request for information (Snails) 84
- Allen, P.M. Expedition to Chemoni Estate, Nandi Hills, Kenya 39
  - Swifts attacked by Sparrows (Letter) 123
- Allen, Priscilla A visit to Texel 97
- Angwin, Dennie What is happening at Lake Naivasha? 118
  - Unusual Lion behaviour and a White-striped Dik-Dik 132
- Archbold, Mary E. (Letter) 60
- Backhurst, Graeme Ariel roosting 134
  - A short account of ticks 146
  - Ringing News 11, 38, 57
  - Ringing Note 92
  - Ringing Notice 84
- Britton, Hazel Nest Record Scheme 20, 37
- Britton, P.L. A new Gull for Kenya *Larus ichthyaetus* ? (Letter) 59
  - Further Frigate Bird on the Kenya coast 93
  - Broad-billed Sandpiper and Herring Gull wintering on the north Kenya coast 93
  - The Garsen Heronry on the Tana River 129
- Britton, Peter & Hazel Pomarine Skua on the Kenya coast 4
  - White-faced Tree Ducks nesting on islets off the Kenya coast 5
  - Migratory Pygmy Kingfishers in coastal Kenya 128
- Britton, Peter L. & Duffus, Phillip Great Black-headed Gulls at Malindi 51
  - & Sugg, M. St J. Birds recorded on the Kimilili Track – a postscript 34

SMITHSONIAN
SEP 08 1975
LIBRARIES

Borruso, S. (Letter) 25
Bowles Vere, V. Wednesday morning bird walks 119
Brown, D.S. Request for information (Freshwater molluscs & Maps) 10
Brown, L.H. East African Nest Record Scheme 21
  Probable Wedge-tailed Shearwater *Puffinus pacificus* at Watamu 23
Clifton, M.A. A congregation of butterflies 167
Cunningham van Someren, G.R. A note on the Pintail Whydah *Vidua macroura* 15
  At sea off Watamu 19
  Exploitation of a food source in a feeding association of Whydahs 35
  Army Ants; The Insect Societies: A catologue and reclassification of the Ethiopian Ichneumonidae.(Review) 40
  Frehwater snails, Schistomiasis or Bilharzia 93
  Haplochilichthys antinorii (Letter) 99
  Sisal flowers, nectar and birds 104
D.A. Dr Kamau on the geology of the Rift Valley 108
Davies, Granville Hannington to Baringo the hard way 168
Dowsett, R.J. (Letter) 60
Dyer, A. (Letter) 59
E.M.E. Lady Wilson - An Appreciation 137
Frazier, Jack The Olive Ridley Sea Turtle in East Africa 150
G.C.B. Species diversity in temperate and tropical Ichneumonidae 151
Gordon, H.M. Klipspringer in association with Redwing Starling 149
Grumbley, L.A.S. Flora of Upland Kenya 25
  A visit to Saiwa Swamp and Mt. Elgon National Park 164
Grumbley, Tom Easter at Lake Baringo 82
Harper, John (Letter) 41
  Kisumu Heronry 79
Harper, John & Lyn Where do all the House Martins go? 113
  Cherengani Hills, Chiffchaff and Black Kite 129
  White-eyed Pochard at Marsabit 163
Harvey, W.G. The occurrence of waders in the Dar es Salaam area of Tanzania:
  Part 1. 48
  2. 66
  3. 80
  3(2)90
  Further records of Madagascar Pratincoles *Glareola ocularis* near Dar es Salaam 71
  White-cheeked Terns *Sterna repressa* near Dar es Salaam Tanzania 85
  Unusual behaviour of Rufous Chatterers 96
Hopson, A.J. & J. A Buff-breasted Sandpiper *Tryngites subruficollis* at Kerio Bay, Lake Rudolf 18
Hopson, A.J. A further record of the Kentish Plover at Lake Rudolf 18
  Egyptian Plovers in the Lake Rudolf Area 131
Hopson, Jane & Tony Further records of the Broad-billed Sandpiper *Limicola falcinellus* from Lake Rudolf 33
  Sooty Gulls at Lake Rudolf 131
Hopson, Jane & Tony with Patricia Robertson Skuas at Lake Rudolf 31
Howell, K.M. Bats collected at Lake Rudolf 14
Howell, K.M. & Wrangham, Richard First record of the Dwarf Slit-faced Bat *Nycteris nana* in Tanzania 36
Irvin A.D. & R.M. Lions, Civets and Servals 148

Irvine, G. & D. Down on the Tana 159
Jachowski, Richard L. Marine Science Survey 170
J.B.G. The identification of grasses in East Africa (Review) 122
J.G.K. The social life of the Lion (Review) 57
J.G.T. A Guide to the snakes of Uganda (Review) 161
J.W-C. Olorgasailie trip 121
Jones, D.K. Melanistic Serval Cats 162
Kigaye, M.K. & Purton, M.D. Parasites collected from a fledgling Double-toothed Barbet *Lybius bidentatus* 74
Kock, Deiter Hildegarde's Tomb Bat *Taphozous hildegardeae* Thomas, 1909 first record for Tanzania 70
Egyptian Tomb Bat *Taphozous perforatus* E. Geoffroy 1818 first record from Uganda 130
Accidental death of a Greater Long-fingered Bat *Miniopterus inflatus* Thomas 1901 162
Lee, Henry J. Miscellaneous notes on the behaviour of Kenya birds 54
Leuthold, Walter & Barbara Recent observations of migrating shore and water birds in Tsavo East National Park 72
Leuthold, Walter Inland observations of the Terek Sandpiper 153
Loveridge, Arthur Additions to the avifauna of Budongo Forest, Uganda 160
Madge, Graham A probable Sandwich Tern on the Kenya coast 30
Mann, Clive F. A second Pomarine Skua on the Kenya coast 31
A record of a Collared Flycatcher *Ficedulla albicollis semitorquata* in Western Kenya 78
Some bird notes from the Mara 78
Martin, Valerie M. Jamhuri camp at Ng'oina Estate 24
Matzke, Mary Ann & G. Observations on a Barred Owlet family 154
McCartney, F.J. Ostracised Little Swift and loyalty of a White-winged Widowbird 107
Meadows, B.S. & Weston, J.K. Icterine Warbler and Chiffchaff on Mt. Kenya 95
Meadows, B.S. and Weston, John & Dianne Spotted Redshank in Kenya during March 1974 103
Meadows B.S. A June record of the Madagascar Pratincole on the Kenya coast 102
Mungure, Sifaeli A. A brief interesting observation on Sandgrouse at Seronera River Pool 52
Ng'Weno Fleur Marine life trip 133
Norris, C.E. A Bittern in Nairobi National Park 163
Osborne, J.F. Hildegarde's Tomb Bat - Tanzania (Letter) 99
Pitman, C.R.S. Fossorial snake gives live birth (Letter) 9
Hornbills and Bats 56
P.J.G. Leslie Desmond Edward Foster Vesey FitzGerald (Obituary) 87
East African vegetation (Review) 135
Plumtree, Patricia Black and White Cuckoos (Letter) 76
P.M.A. Exhibition of bird photographs by John Karmali 41
Camp in the grounds of Falloden Cottage, Ol Kalou 109
Lecture - 9th September 1974 (On Superb Starlings) 138
Nutritional studies on wild animals in East Africa 166
Reynolds, J.F. White-fronted Bee-eaters apparently taking bread 115
Co-operative breeding in Red and Yellow Barbets 144
Sessions, P.H.B. House Martins (Letter) 133
Spindlow, D.D. Two exciting Kenya birding spots 9

Turner, D.A. & Forbes-Watson, A.D. The Long-legged Buzzard *Buteo rufinus* in East Africa 2
Williams-Chandley, Jane Rearing a nestling Pigeon 8
Williams M.C.B. Frigate Birds (Letter) 42
Wilson, J.R. Colour ringing on Aldabra Islands (Request for information) 170
Wood, Derek A. A Bittern at Lake Naivasha 104

- - - - - - - - - - - - - - -

SUBJECTS

Aberdares 39, 148
Acacia 14, 52
Acarina 38, 74, 146
Achatina fulica 84
Accipiter badius 21
A. melanoleucos 22
A. minullus 21
A. rufiventris 21
A. tachiro 22
Actophilornis africana 118
Aden, Gulf of 4
Adenium obesum 83
Aenictus sp. 40
Aeschynomene elaphroxylon 83
Agave sisalina 104
Agrostis trachyphylla 25
Alauda arvensis 97
Alcippe abyssinicus 39
Aloe spp. 106
Alopochen aegyptiaca 140
Amadina fasciata 121
Amandava spp. 36
Amauris ochlea 167
Ambatch 83
Amblyomma spp. 147
Anas acuta 72
A. clypeata 72
A. crecca 72
A. hottenta 163
A. penelope 73
A. querquedula 73
A. strepera 73
A. sparsa 109
Anastomus lamelligerus 79
Andropadus curvirostris 39
A. importunis 116
Angola 36
Anteater Chat 37
Ants, Army 40
Anthreptes collaris 55, 119
Anthus pratensis 97
Apalis, Black-breasted 119
Apalis flavida 119
Apus affinis 107, 159
A. apus 123, 134
A. niansae 123
Aparallactus jacksoni 9
Apodidae 37
Aquila rapax 22, 54, 60, 121, 140
A. wahlbergi 2, 22, 96
Arachnida 38, 146
Arboretum 119, 120
Ardea melanocephala 79
A. purpurea 129
Ardeola ibis 79
A. ralloides 129
Arenaria interpres 82, 117, 170
Argasidae 146
Aristida sp. 122
Arthropoda 146
Aruba Dam 72, 73, 153
Arusha Chini 6
Athi River 11
Atlantic Ocean 4
Avocet 97, 98
Aythya farina & *A. nyroca* 163
Babbler, Abyssinian Hill 39
  Arrow-marked 96
  Northern Pied 106
Baboon 94
Badgers, Honey 20
Bally, Dr 44
Balearica pavonina 123, 140
Bamburi Beach 93, 133
Baobab tree 158
Barbet, Black-collared 144
  Brown-throated 121
  d'Arnaud's 159

Barbet, Double-toothed 74
  Red and Yellow 121, 144
  White-headed 144
Barro Colorado Island, Panama 40
Bat, Dog-faced Fruit 56
  Dwarf Slit-faced 36
  Egyptian Tomb 130
  Greater Long-fingered 162
  Lesser Fruit 56
Bateleur 22
Batis molitor 119
Bee-eater, Carmine 19
  Red-throated 115
  White-fronted 115
Bilentiginosus sp. 123
Bilharzia 10, 93
Biomphalaria spp. 94
Bittern 104, 123, 163
  American 123
Blackcap 39, 95
Bladderwort 94
Boophilus spp. 147
Bonito 19
Botaurus stellaris 104, 123, 163
B. lentigenosus 123
Brachytarsina allaudi 70
Bradypterus baboecola 164
  cinnamomeus 109
Bubalornis albirostris 158
Bubo lacteus 37, 83
Buccanodon leucotis 144
Bug, Cimicid 70
Bulbul, Yellow-vented or Dark-capped 37, 106, 116, 119, 158
Bulinus spp. 94
Buphagus spp. 37
Buphagus africanus 55
B. erythrorhynchus 159
Burhinidae 48
Burhinus capensis 120
B. vermiculatus 66
Bush Pig 165
Busia 11
Buteo oreophilus 21
B. rufinus 2
B. rufofuscus 22, 119, 121
B. vulpinus 3
Butiaba 11
Butorides striatus 117
Butterfly, African Monarch 167
  (Blue) Lycaemid 20
Butterfly, Novice 167
Caeselpina spinosa 24
Calidris alba 91,117,120
C. alpina 50
C. canutus 90
C. ferruginea 17, 90, 117
Camaroptera simplex 121
Canary, White-bellied 121
  Yellow-fronted 116
Cape Hen 23
Cameroun 36
Campethera nubica 159
Caprimulgidae 37
Cardioderma cor 14
Carallumia gracilipes 83
C. retrospiciens 83
C. socotrana 83
Caretta caretta 150
Cercococcyx spp. 169
Cercopithecus mitis 165
Ceryle rudis 55, 117
Ceuthmochares aereus aereus 160
Ceylon 24, 51
Ceyx picta 55, 128
C. p. natalensis 128
Charadriidae 48
Charadrius alexandrinus 18, 51
C. asiaticus 17, 69
C. dubius 67
C. hiaticula 18, 67, 97, 117
C. h. tundrae 67
C. leschenaultii 18, 69
C. marginatus 18, 68
C. mongolus 69
C. pecuarius 17, 18, 67
C. tricollaris 67
Chanler's Falls 70
Charles II 24
Chat, Robin 39
Chelictinia (*Elanus*) *riocourii*
Chelonia mydas
Cherengani Hills 129
Chiffchaff 95, 129, 165
Chincon, Countess of 24
Chincona 24
Chinomids 114
Chlidonias hybrida 85
C. leucopterus 85
Chloropeta similis 39
Chyulu Hills 95
Cichladusa guttata 9

Ciconia abdimi 18
C. ciconia 11
C. espiscopus 78
Cinnyricinclus leucogaster 116, 120
C. sharpii 120
Circaetus cinereus 22
C. gallicus 21
Circus spp. 104
C. aeruginosus aeruginosus 73
C. a. ranivorus 21
Cisticola, Red-faced 78
  Tabora 78
  Trilling 79
  Winding 37
Cisticola chubbi 34
C. erythrops 78
C. fulvicapilla 78
C. galactotes 37
C. hunteri 34, 109
C. woosnami 79
City Park 119
Civet 148
Civettictus civetta 148
Clamator jacobinus 76
Cocunelid Ladybirds 87
Colius macrourus 55, 159
C. striatus 106, 116, 119
Colobus 39
Colobus polykomos 165
Columba delagorguei 120
Contracaecum spiculigerum 99
Congo 114
Coot, Red-knobbed 59, 118
Coracias caudata 158
Cordon-bleu 36, 159
  Blue-capped 121
  Red-cheeked 116
Cormorant, Long-tailed 79
Corvus albus 25, 119
C. monedula 98
Corythaixoides leucogaster 121
Cossypha cyanocampter 39
C. polioptera 39
Coypu (or Nutria) 118
Crakes 159
Crake, African 54
Crane, East African Crowned 123, 140
Crater Bay, Central I'd, L. Rudolf 131
Craterostigma 109
Crayfish, Louisianna Red Swamp 119
Creatophora cinerea 106
Crescent Island 118
Crex egregia 54
Crow, Pied 9, 80
Cuckoos 77
  Black and White 76
Curlew 9, 80
Cut-throat 121
Cynodum plectostachyum 35
Cyperus 35
Cyperus rotundis 118
Danaids 167
Danaus chrysippus 167
Dar es Salaam 48, 66, 85, 90, 91, 96, 112, 168
Dawlish Warren, Devon 30
Delichon urbica 113, 133
Dendrocygna bicolor 5
D. viduata 5
Dendropicos fuscescens 109
Dermochelys coriacia 150
Dik-Dik, Kirk's 133
Dinemellia dinemelli
Dolabella sp. 133
Dolphins 20
Dorylus (annoma) nigricans 40
Dove, Lemon 166
  Namaqua 121
  Red-eyed 119
  Ring-necked 109
Dromas ardeola 55, 66, 112, 170
Duck, Black 109
  Ferruginous 163
  Fulvous tree 5
  White-backed 163
  White-faced tree 5
Dunlin 50
Durban 150
Dutch East Indies 24
Eagle, African Hawk 22
  Ayre's Hawk 22
  Bateleur 60, 158
  Brown Harrier 22
  Crowned Hawk 22, 121
  Fish 22, 58, 104, 140
  Long-crested 22
  Martial 22
  Tawny 22, 54, 60, 121, 140
  Verreaux's 22
  Wahlberg's 22, 96
Eciton 40
Edithcolea grandis 83

Egret, Cattle 79
Great White 79
Little 79, 129
Yellow-billed 79
Egretta alba 79
E. ardesiaca 129
E. garzetta 79, 129
E. intermedia 79
Elanus (Chelictinia) riocourii 21
E. caeruleus 22
El Barta Plains 153
Eldama Ravine 6, 139
Elephant Camp 9
Elephant Shrew, Yellow-rumped 70
Elgeyo Escarpment 141
Elgeyu 6
Elgon, Mt. 34, 108, 114, 129
Entebbe 23, 56
Eoctenes nycteridis 36
Epomorphorus anurus 56
E. labiatus 56
Eragrostis spp. 122
Eretmochelys imbricata 150
Estrilda spp. 36
E. bengala 116, 159
E. cyanocephala 121
Euplectes albonotatus 107
E. ardens 120
E. jacksoni 56
Falco biarmicus 21
F. cherrug 3
F. chicquera 21
F. pelegrinoides 3
F. peregrinus 3, 22
F. rupicoloides 22
F. tinnunculus 21, 120
Falcon, Red-necked 21
Pygmy 135
Fasciola gigantea 94
Felis serval 148, 162
Ferguson's Gulf 14, 18, 31, 32, 33
Ficedula albicollis 78
F. a. semitorquata 78
F. hypoleuca 78
Finches, Fire 116
Finfoot, Peter's 159
Flamingo, Lesser 140
Greater 140
Flora of Upland Kenya 25, 136
Flycatcher, chin-spot 119
Collared 78
Flycatcher, Paradise 119
Pied 78
Spotted 116
White-eyed Slatey 119
White-tailed Crested 39
Forest, Budongo 160
Fossorial Snake 9
Fregata spp. 42, 93
F. ariel 93
F. minor 43, 93
Friesian Islands 97
Frigate Bird 42
Great 43
Frog, Red-banded 60
Fulica cristata 59, 118
Gadwall 73
Gallinago media 82
Gallinula chloropus 118
Gannets 117
Garganey 73
Garissa 9
Garsen 129, 167
Gedi 20
Geese, Egyptian 140
Germo albacora 19
Ghana 36
Gibralter Island, L. Baringo 82
Glareola ocularis 71, 102
Glaucidium capense 154
G. perlatum 158
Go-away bird, White-bellied 121
Godwits 82
Godwit, Bar-tailed 50, 80
Black-tailed 80
Goshawk, African 22
Dark Chanting 21
Gaber 21
Pale Chanting 22
Granatina sp. 36
Grebe, Little 118
Greenbul, Cameroun Sombre 39
Zanzibar Sombre 116
Greenshank 55, 80, 81, 117, 120
Grenadier 36
Grevillia tree 24
Guaso Njiro 70
Gulls 37
Gull, Black-headed 52, 98
Great black-headed 51, 59
Grey-headed 31, 131
Lesser black-backed 31, 51, 113, 131

Gull, Herring 51, 59, 98, 112
   Sooty (Hemprich's) 4, 22, 31, 117, 131
Gulu 2
Gypeatus barbatus 21, 54, 60
Gyps africanus 22
G. rueppelii 21
Haemaphysalis sp. 147
H. leachi 147
Haematopus ostralegus 9, 66, 97
Halcyon leucocephala 37
Haliaeetus vocifer 22, 58, 104, 140
Hammerkop 54
Haplochilichthys antinorii 99
Harrier, African Marsh 21
   European Marsh 73
Hawk, Great Sparrow 22
   Harrier 22, 158
   Little Sparrow 21
   Rufous Sparrow 21
Helichrysum, perhaps *newii* 25
Hell's Gate 108, 140
Hemiptera polyctenidae 36
Henna 129
Heronry, Kisumu 79
Heron, Black 129
   Black-necked 79
   Greenbacked 117
   Grey 129
   Night 123, 129
   Purple 129
   Squacco 129
Hexabranchus sp. 133
Hieraaetus dubius 22
H. fasciatus spilogaster 22
Himantopus himantopus 91
Hippo 167
Hippolais icterina 95
H. polyglotta 95
Hirundo abyssinicus 107, 159
H. fuligula 120
H. rustica 11, 113
H. semirufa 78
Hoopoe, Wood 158
Hornbill, Black and White 56
   Hemprich's 83
   Red-billed 159
   Silvery-cheeked 56, 116
Hunter's Lodge 56
Hyalomma 147
Hydrobates leucorhoa 19
Hylia, green 39
Hypericum 95
Hyonyssus eurythrix 74
Hypochera spp. 36
Hypoxis 109
Ibis, Glossy 129
   Sacred 37, 54, 79, 140
Ibis ibis 54, 79, 159
Ichneumonidae 151
Ikanga Sisal Estate, Tanga 70
Illadopsis, Brown 169
   Mountain 39
   Pale-breasted 169
   Scaly-breasted 39
India 51
Indian Ocean 4
Ireland 5
Isiophorus gladius 19
Ixodes 147
Ixodidae 38, 146
Jacana, African 118
Jacaranda trees 24
Jackdaw 98
Jadini 22
Kadam, Mt. 2
Kakamega Forest 37
Kalakol 14
Kalom 131
Kamakia 39
Kamasia (Tugen Hills) 141
Kandetcha Dam 72, 73
Kange Sisal Estate 99
Karamoja 2
Karatina 103
Karen 15
Karura Forest 55, 56, 119
Kaupifalco monogrammicus 21
Kazakhstan 11
Kenya, Mt. 25, 39, 59, 95, 108
Kerega/Rasuale 49, 92
Kericho 24
Kerio Bay 18
Kerio River 17
Keritor Hill 24
Kestrel, Common 21
   European 120
   White-eyed 22
Kiboko River 56
"Kibora" (Sea Turtle) 150
"Kigange" (Sea Turtle) 150
Kikambala 112

Kileleshwa 120
Kilifi 19, 20
Kilimanjaro Mt. 108
Kinangop 2
  South 34
Kingfisher, Grey-headed 37
  Pied 55
  Pygmy 55, 128
Kisima Farm 59
Kisumu 6, 114
Kite, Black 21,22, 119, 129
  Black-shouldered 22
  Red 3
  Swallow-tailed 21
Kitengala 58
  Kiunga 93
Kiunga Island 5,6
Kiwiyu Islands 5
Kizingitini (Lamu) 150
Klipspringer 149
Kolodini (Kilindini?) 70
Konza 54
Kudu, Lesser 133
Kinduchi 49, 67, 96, 150
Kuwinda Estate (Langata) 120
Labidus 40
Lagonosticta spp. 36
L. Senegala 116
Lake Baragoi (Hannington) 139
  Baringo 82, 140, 168
  Bogoria (Hannington correction) 138, 168
  Jipe 2
  Magadi 6, 11, 121
  Malawi 102
  Manyara 140
  Naivasha 55, 94, 99, 103, 104, 118, 119
  Nakuru 54, 113, 114
  Ol Bolossat 118
  Paradise 58
  Rudolf, 16, 17, 18, 31, 33, 131
  Victoria 23, 52, 120
Lammergeyer 21, 54, 60
Lamprotornis caudatus 158
L. chalybaeus 106, 159
L. corruscus 116
Lamu 6
  Archipelago 9
Langata 120
Laniarius funebris 121
Lanius collaris 119
L.dorsalis 121
Lanner 21
Lapwing 97
Laridae 37
Larus argentatus 51, 59, 98, 112
L. a. heuglini 113
l. cirrocephalus 31, 131
L. fuscus 31, 32, 51, 113, 131
L. hemprichii 4, 22, 30, 117, 132
L. ichthyaetus 51, 59
L. ridibundus 52, 98
Lavia frons 14
Lawsonia inumis 129
Leonotis 86, 120
Lepidochelys olivacea 150
Lepus capensis 60
Liliaceae 104
Limicola falcinellus 33, 91, 112
Limicolaria martensiana 84
Limosa lapponica 80
L. limosa 80
Lion 132
Lion Hill 113
Lobo Springs 149
Loboi River 168
Locusts, Red 87
Logumukum 169
Loiengalani 2
Lolgorien 78
Lonchura spp 36
L. bicolor 116
L. cucullata 15, 116, 119
Longclaw, Sharpe's 34
Longonot mt. 108, 115
Lophaetus occipitalis 22
Loxaspis miranda 70
Luscinia megarhynchos 98
Lybius bidentatus 74
L. leucocephalus 144
L. torquatus 144
Lymnaea sp. 94
Macronyx sharpei 34
Madagascar 102
Magadi Road 35, 121
Main Island, Baringo 82, 83
Maji ya Moto 139
Malindi 51, 103, 112, 150
Mambrui 150
Manda Island 9
Mando Mtoto Island 9

Mannikins 15
  Bronze 116, 119
  Rufous-backed 116
Mara River & Bridge 78
Maralal 153
Marigat 168
Marlin 19
Marsabit 59
Martin, African Rock 121
  African Sand 114
  European Sand 114
  House 113, 133
Masabuku, (Masabubu) 70
Mata-Mata (S.W. Africa) 2
Mau Narok 11
Maweni 94
Maziwi Island 150
Mbegani 48, 82
Mboamaji 48
Megadermatidae 14, 75
Melaenornis chocolatina 119
Melawa River 109
Melierax canorus (Poliopterus) 22
M. gaber 21
M. metabates 21
Mellivora capensis 20
Merops bullockoides 115
M. m. bulocki 115
M. nubicus 19
Mesopicus goertae 109
Mida Creek 23, 112
Milvus migrans 22, 119, 129
M. milvus 3
Miniopterus inflatus 162
M. schreibersi 162
Miombo 154
Mjimwema 49
Mkulumuzi River 99
Mlango wa Hindi 6
Mogotio 133
Molo 133
Mombasa 4, 70, 132
Monkey, Blue 164
  Colobus 164
Monticola saxatilis 120
Moorhen 118
Moshi 6
Motacilla alba 116
M. a. vidua 159
M. flava thunbergi 160
Mousebird, Blue-naped 55, 159
  Speckled 106, 116, 119
Mozambique 150
Msasami 49, 68, 71, 80, 85, 91
Mtwapa Creek 116
Muscicapa caerulescens 169
M. griseigularis 169
M. striata 116
Musoma 22
"Mweli" (Grain) 15
Myocastor coypus 118
Myrmecocichla aethiops 37
Myrsidae sp. 74
Mzimbazi Creek 42, 49
Nairobi 34, 56
Naivasha 2
Nakuru 139
Namanga 133
Namaraputh 131
Naro Moru Track 95
National Park, Tsavo (East) 72, 153
  Tsavo (West) 95, 148
  Gombe 36
  Nairobi 119, 121
  Nakuru 51
  Serengeti 52
  Nairobi 54, 55, 57, 120, 163
  Lake Manyara 58
  Aberdare 148
  Mt. Elgon 164
  Queen Elizabeth (Ruwenzori) 160
  Marine 170
  Kidepo 2
  Amboseli Game Reserve 133
  Buffalo Springs Game Reserve 153
  Masai Mara Game Reserve 132
  Selous Game Reserve 154
Ndara Borehole 73
Necrosyrtes monachus 22
Nectarinia amethystina 106, 119
N. famosa 106, 120
N. kilimensis 106, 119
N. mediocris 39
N. preussi 39
N. reichenowi 34, 106, 120
N. senegalensis 106
N. venusta 119
N. verticalis 120
Neivamcyrmex 40

Nelion 25
Neocossyphus rufus gabunensis 160
Neophron percnopterus 21
Netherlands 97
Ng'ama Swamp 169
Ngoina Estate 24
Ngombeni 70
Ngong Hills 54, 108
Ngulia 95, 148
Nightingale 98
Nightjars 37
Noddie 19
North Island, Baringo 82, 83
Nudibranchs 133
Numenius arquata 9, 80
N. phaeopus 9, 80, 117
Nutria 118
Nyali Beach 4, 93, 112
Nyando Eascarpment 24
Nyanza 24, 79
Nycteridae 14
Nycteris hispida 14
N. nana 36
Nycticeius (Scoteinus) schliefferi 14
Nycticorax nycticorax 123, 129
Nyeri 166
Nymphaea capensis
Obituary: L.D.E.F.Vesey Fitzgerald 87
Oena capensis 121
Oenanthe pleschanka 120
Ol Arabel River 169
Oloimatasha Swamp 169
Ol Lolokwe 163
Olorgesailie 121
Omo Delta 131
Omo River 131
Onycognathus morio 106, 149
O. salvadorii 83
Orangi River 52
Orchids 97
Orchis macululata 97
O. morio 97
Oreotragus oreotragus 149
Oriole, Black-headed 109
  European Golden 116
Oriolus larvatus 109
O. oriolus 116
Osprey 9
Ostrich 54
Otus scops senegalensis 117
Owl, African Scops 117
  Verreaux's Eagle 37, 83
Owlet, Barred 154
  Pearl-spotted 158
Oxpeckers 37
  Red-billed 159
  Yellow-billed 55
Oyster Bay 42
Oystercatcher 9, 48, 66, 97
Oyugis 79
Pandion haliaetus 9
Panicum 122
Panthera leo 57, 132, 148
Parrot, Orange-bellied 158
  Red-headed 37, 109
Parus albiventris 55, 119
Passer eminibey 121
P. iagoensis 106
P. griseus 106, 107, 123, 158
P. swainsonii 123
Pectoralis exustus 52
P. gutteralis 52
Pelican, Great White 98
Pelicanus onocrotalus 98
Penenirmus sp. 74
Pennesetum typhoides 15
P. mezianum 35
Pentaschistis minor 25
Peregrine 22
Peru 24
Petten 98
Petrel, Leach's 19
Petronia, Yellow-spotted 121
Petronia xanthocollis
Phaloropus spp. 19
P. lobatus 19
Phalacrocorax africanus 79
Philomachus pugnax 11, 17, 91
Phoenicopterus minor 140
P. ruber 140
Phoeniculus purpureus 158
Phrynomerus bifasciatus 60
Phylloscopus collybita 95, 129, 165
P. trochilus 98
Pigeon, Bronze-naped 120
  nestling 7
Pintail 72
Pipistrellus nanus 14

Platalea alba 79
P. leucorodia 98
Platysteira peltata 39
Plegadis falcinellus 129
Plocepasser mahali 158
Ploceus baglafecht 16, 106, 119
P. cucullatus femina 160
P. jacksoni 120, 140
P. melanocephalus 140
P. subaureus 56
P. xanthops 106
Plover, Black-winged 67
  Caspian 17, 69
  Crab 55, 66, 112, 170
  Egyptian 131
  Greater Sand 18, 50, 69
  Grey 67, 80, 117
  Kentish 18, 51
  Kittlitz's 17, 18, 67
  Lesser Golden 67
  Little Ringed 50, 67
  Mongolian Sand 69
  Ringed 18, 67, 82, 97, 117
  Senegal 66
  Three-banded 68, 81
  White-fronted Sand 18, 51, 68, 91
Pluvianus aegyptius 131
Pluvialis dominica 67
P. squatorola 67, 117
Pochard, African 163
  European 163
  White-eyed 163
Podica senegalensis 159
Podiceps ruficollis 118
Pogoniulus leucomystax 109
Poicephalus gulielmi 37, 109
P. rufiventris 158
Polemaetus bellicosus 22
Polihierax semitorquatus 135
Polyboroides radiatus 158
P. typus 22
Potamochoerus porcus 165
Pratincole, Madagascar 71, 102
Prionops plumata 83
Prinia subflava melanorhyncha 160
Procellaria assimilis 19
Pseudonigrata arnaudi 121
Pteronyssidae 74
Pteronyssus conurus 74
Puffinus pacificus 22
Pulmonata:Achatinidae 84
Pycnonotus barbatus 37, 106, 116, 119
Quelea quelea 120 158
Quelea, Red-billed 121
Quseir (= Kosseir?) 18
Rabai 70
Rogati 39
Rails 159
Rallidae 159
Raillietina 75
Rapogi 79
Ras Kiomboni 49
Ras Kitau 9
Ratel 20
Recurvirostra avosetta 97
Red Sea 4, 51
Red Shank 50, 81, 97
  Spotted 73, 103
Review:
  Army Ants 40
  The Insect Societies 40
  A catalogue & reclassification of the Ethiopian Ichneumonidae 40
  The Social life of the Lion 57
  The identification of grasses in East Africa, Flora of Trop. E.A. 122
  East African vegetation 135
  Species diversity in temperate and tropical Ichneumonidae 151
  Guide to the Snakes of Uganda 161
  Record Review - Birds of the African Rain Forests 169
Rhipicephalus spp. 147
R. pulchellus 147
Rhizocerpum geographicum 25
Rhynchocyon crysopygus 70
Rynchotragas kirki 133
Rift Valley 55, 108
Ringing News 11, 38, 57
Riparia paludicola 114
R. riparia 114
Robin, White-starred Bush 120, 166
Rogati Hills 168
Roller, Lilac-breasted 158
Rostratulidae 48
Rostratula benghalensis 92
Rowallen Boy Scouts Camp 119, 120
Ruff 11, 17, 91
Rufous Chatterers 96

Russia 113
Sabaki River 51, 102, 112
Sadani 150
Sagittarius serpentarius 22, 59
Sailfish 19
Saiwa Swamp 164
Saker 3
Salvadora 14
Sandai 168
Sanderling 49, 82, 91, 117, 120
Sandgrouse, 52
  Chestnut-bellied 52
  Yellow-throated 52
Sandpiper, Broad-billed 33, 91, 112
  Buff-breasted 17, 33
  Common 81, 117, 120
  Curlew 17, 50, 90, 91, 117
  Green 81
  Marsh 80
  Terek 82, 83, 90, 153
Sarda spp. 18
Saudi Arabia 11
Scale Insects 87
Schistomiasis 93
Schistosoma bovis 94
S. haematobium 94
S. mansoni 94
Scolopendra sp. 144
Scopolacidae 48
Scopus umbretta 54
Sea Hare 133
Sea Turtle, Green 150
  Hawksbill 150
  Leathery 150
  Loggerhead 150
  Olive Ridley 150
Secretary Bird 22, 59
Seed-eater, Streakey 16, 119
  Thick-billed 120
Selander Bridge 49
Senecio kenyophytum 25
Serinus burtoni 120
S. dorsostriatus 121
S. mozambicus 116
S. striolatus 16, 119
Seronera River 52
Serval 148
Serval Cat, melanistic 162
Seychelles 23
Shanzu 117
Shearwater 19
  Wedge-tailed 22
Shellduck 98
Shikra 21
Shimoni 70
Shoveller 72
Shrike, Curly-crested Helmet 83
  Fiscal 8, 119
  Slate-coloured Boubou 121
  Teita Fiscal 121
Sierra Leone 5
Simambaya Island 6
Siria Escarpment 78
Sisal Flowers 104
Sitatunga 164
Skua, Arctic 4, 31, 32
  Great 4, 31
  Long-tailed 4, 31, 32
  Pomarine 4
Smart's Swamp, Limuru 103
Snail, East African Giant 84
  Freshwater 93
  Land 84
Snipe, Great 82
  Painted 92
Soga 49
Somalia 112
Soroti 6
Sotik 24
Spanish Dancer 133
Sparrow, Chestnut 121
  Grey-headed 106, 107, 158
  Kenya Rufous 106
  Swainson's 123
Spirabilis spicta 17
Spoonbill 79, 98
Sporobolus spp. 122
Spreo superbus 106, 138, 158
Squirrel, Ground 159
Sri Lanka 4
Steganeura spp. 36
Stephanoaetus coronatus 121
Starling, Black-breasted Glossy 116
  Blue-eared Glossy 106
  Bristle Crowned 83
  Glossy 159
  Red-winged 106, 149
  Ruppell's Long-tailed 158
  Sharpe's 120
  Superb 106, 138, 158

Starling, Violet-backed 116, 120
    Wattled 106
Stercorarius longicaudis 4. 31, 32
S. parasiticus 4, 31
S. pomarinus 4, 30
S. skua 4
Sterna spp. 19
S. albifrons 9, 19, 102, 117
S. bengalensis 19, 30, 85, 117
S. bergii 19, 85
S. caspia 9, 19, 32
S. dougallii 19, 85
S. hirundo 97
S. nilotica 30
S. paradisea 85
S. repressa 19, 85
S. sandvicensis 22
Stilt, Black-winged 91
Stint, Little 11, 17, 50, 90, 91
Stork, Abdim's 78
    Open-bill 79
    Wooly-necked 78
    Yellow-billed 54, 79, 159
Streptopelia capicola 109
S. semitorquata 119
Struthio camelus massaicus 54
Sunbird 86
    Amethyst 106, 119
    Bronze 106, 119
    Collared 55, 119
    Eastern Double-collared 39
    Golden-winged 34, 106, 120
    Green-headed 120
    Malachite 106, 120
    Northern Double-collared 39
    Variable 119
Succulents, East African 44
Sukulu Hill 130
Sula bassana 117
Suswa 108
Swallow, European 11, 113
    Rufous-chested 78
    Striped 106, 159
Swifts 37
    Common 123, 134
    Little 159
    Nyanza 159
Sylvia atricapilla 39, 95
S. nisoria 11
Tadorna tadorna 98
Tana River 9, 70, 129, 158
Tanga 70
Tanzania 23
Taphozous headinus 70
T. hildegardeae 70
T. perforatus 70, 130
Taveta 2
Teal 72
    Hottentot 167
Teddy Bear Island, Baringo 82
Terns 37
    Arctic 85
    Caspian 9, 19, 32
    Common 97
    Gull-billed 30
    Lesser-crested 19, 30, 85, 117
    Little 9, 19, 102, 117
    Roseate 19, 85
    Sandwich 30
    Swift 19, 85
    Whiskered 85
    White-cheeked 19, 85
    White-winged Black 85
Terathopius ecaudatus 158
Terpisphone viridis 119
Texel 97
Thalassornis leuconotus 163
Thicknee Spotted 120
Threskiornis aethiopica 37, 54, 140
Thrush, European Rock 120
    Olive 119
    Song 96
Ticks 146
Tilapia 82
Tinkerbird, Moustashed Green 109
Tit, White-bellied 55, 119
Tiwi 70
Tockus erythrohyncus 159
T. fasciatus 160
T. hemprichii 83
Todenyang 131
Topi 166
Torgos (Aegypius) trocheliotus 22
Trachyphonus darnaudi 159
T. erythrocephalus 121, 144
Tragelaphus spekei 164
Tribulus terrestris 83
Trichastoma rufipennis 169
Tricholaema melanocephalum 121
Trigonoceps occipitalis 22

Tringa erythropus 73, 103
T. glareola 81
T. hypoleuca 81, 117, 120
T. nebularia 55, 80, 117, 120
T. ochropus 81
T. stagnatilis 81
T. terek 90, 153
T. totanus 81, 97
Trocheocercus albonotatus 37
Tryngites subruficollis 17, 33
Tunny Yellowfin 19
Turaco schuetti 160
Turdoides hypoleucus 106
T. jardinei 96
T. rubiginosus 96
Turdus abyssinicus 119
T. philomelos 96
Turnstone 49, 82, 90, 91, 117, 170
Uganda 2
Ukunda 70
Uraeginthus spp. 36
Urtricularia 87, 94
Vanellus lugubris 66
V. melanopterus 67
V. spinosus 140
V. vanellus 97
Verspertilionidae 14
Viduines 35
Vidua fischeri 35
V. hypocherina 35
V. macroura 15, 35, 120
Vulture, Egyptian 21
   Hooded 22
   Lappet-faced 22
   White-backed 22
   White-headed 22
   Ruppell's Griffon 22
Waders 48
Wagtail, African Pied 116, 159
Warbler, Barred 11
   Cinnamon Bracken 109
   Grey Wren 121
   Icterine 95
   Little Rush 164
   Mountain Yellow 39
   Spotted Morning 9
   Willow 98
Watamu 19, 22, 93
Water Dikkop 66
Water Lily 118
Wattle-eye, Black-throated 39
Weaver Buffalo 158
   Golden 56
   Golden-backed 120
   Grey-headed Social 121
   Holub's Golden 106
   Reichenow's 106, 119
   Sparrow 158
   White-headed Buffalo 138
Wemberi River 6
Wheatear, Pied 120
Whimbrel 9, 67, 80, 117
White-eyes 158
White Stork 11
Whydah Paradise 36
   Pintail 15, 35, 120
   Steel-blue 35
   Straw-tailed 35
Widow Bird, Jackson's 56
   Red-collared 120
   White-winged 107
Wigeon 73
Witu Forest 167
Woodpecker Cardinal 109
   Grey 109
   Nubian 159
Xerus erythropus 159
Yala Swamp 114
Zaire 11, 36
Zambezi River 102
Zambia 2
Zambian Orn.Soc. 37
Zanzibar 150
Zosterops senegalensis 159

- - - - - - - - -

Compiled by Daphne Backhurst,
Box 29003, Kabete.

SMITHSONIAN INSTITUTION LIBRARIES

SMITHSONIAN INSTITUTION LIBRARIES

SMITHSONIAN INSTITUTION WASHINGTON DC

BOUND BY HNM

SMITHSONIAN INSTITUTION LIBRARIES
3 9088 01230 2758